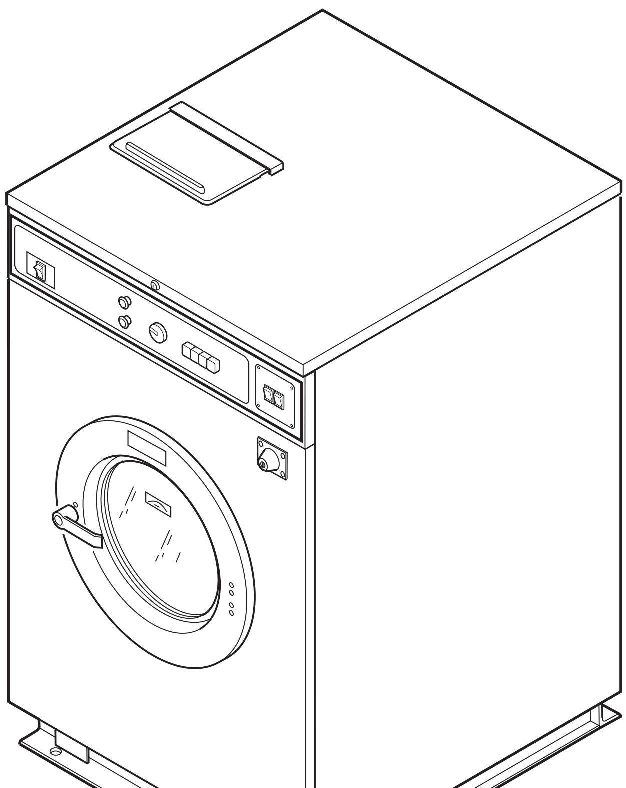
Washer-Extractor

Cabinet Hardmount
Mechanical Timer

Refer to Page 8 for Model Numbers

Troubleshooting



CHM1624C

Alliance Laundry Systems

www.comlaundry.com

Part No. F232202R3
November 2011

Table of Contents

Section 1
Safety Information

Throughout this manual and on machine decals, you will find precautionary statements (“CAUTION,” “WARNING,” and “DANGER”) followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer and those maintaining the machine.

a **DANGER**

Danger indicates the presence of a hazard that **will** cause **severe** personal injury, death or substantial property damage if the danger is ignored.

a **WARNING**

Warning indicates the presence of a hazard that **can** cause **severe** personal injury, death or substantial property damage if the warning is ignored.

a **CAUTION**

Caution indicates the presence of a hazard that **will** or **can** cause **minor** personal injury or property damage if the caution is ignored.

Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.

IMPORTANT

The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE

The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

General Safety Precautions

In the interest of safety, some general precautions relating to the operation of this machine follow.

WARNING

- **Failure to install, maintain, and/or operate this product according to the manufacturer’s instructions may result in conditions which can produce serious injury, death and/or property damage.**
- **Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and that you understand and have the skills to carry out.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury, or death.**

W006R1

(continued)

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer-extractor before servicing.**
- **Never start the washer-extractor with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer-extractor is properly grounded.**

W460

WARNING

Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly or adjustments subjecting you, or the inexperienced person making such repairs, to the risk of serious injury, electrical shock, or death.

W007

WARNING

If you or an unqualified person perform service on your product, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.

W008

Always contact your dealer, distributor, service agent or the manufacturer about any problems or conditions you do not understand.

Important Safety Instructions

WARNING

To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:

W023E

1. Read all instructions before using the washer-extractor.
2. Refer to the GROUNDING INSTRUCTIONS in the INSTALLATION manual (supplied with your washer-extractor) for the proper grounding of the washer-extractor.
3. Do not wash textiles that have been previously cleaned in, washed in, soaked in or spotted with gasoline, dry-cleaning solvents or other flammable or explosive substances. They give off vapors that could ignite or explode.
4. Do not add gasoline, dry-cleaning solvents or other flammable or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
5. Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washer-extractor, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable. Do not smoke or use an open flame during this time.

6. Do not allow children to play on or in a washer-extractor. Close supervision of children is necessary when the washer-extractor is used near children.
7. Before the washer-extractor is removed from service or discarded, remove the door to the washing compartment.
8. Do not reach into the washer-extractor if the wash basket is moving.
9. Do not install or store the washer-extractor where it will be exposed to water and/or weather.
10. Do not tamper with the washer-extractor's controls.
11. Do not repair or replace any part of the washer-extractor or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out.
12. To reduce the risk of an electrical shock or fire, DO NOT use an extension cord or an adapter to connect the washer-extractor to an electrical power source.
13. Use the washer-extractor only for its intended purpose, washing clothes.
14. ALWAYS disconnect the washer-extractor from its electrical supply before attempting any service.
15. Install the washer-extractor according to the INSTALLATION INSTRUCTIONS. All connections for water, drain, electrical power and grounding must comply with local codes and, when required, be made by licensed personnel.
16. To reduce the risk of fire, textiles which have traces of any flammable substances such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc. or anything containing wax or chemicals such as in mops or cleaning cloths, must not be put into the washer-extractor. These flammable substances may cause the fabric to ignite.
17. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
18. Keep the washer-extractor in good condition. Bumping or dropping the washer-extractor can damage its safety features. If this occurs, have the washer-extractor checked by a qualified service person.
19. Replace worn power cords and/or loose plugs.
20. Be sure that water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.
21. The loading door MUST BE CLOSED any time the washer-extractor is to fill, tumble or spin. DO NOT by-pass the loading door switch and permit the washer-extractor to operate with the loading door open.
22. Always read and follow the manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings and precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
23. Always follow the fabric care instructions supplied by the textile manufacturer.
24. Never operate the washer-extractor with any guards and/or panels removed.
25. DO NOT operate the washer-extractor with missing or broken parts.
26. DO NOT by-pass any safety devices.
27. Failure to install, maintain and/or operate this washer-extractor according to the manufacturer's instructions may result in conditions that can produce bodily injury and/or property damage.

NOTE: The WARNING and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining and operating the washer-extractor.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.

Locating an Authorized Servicer

Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Alliance Laundry Systems also recommends contacting an authorized technician and using authorized factory parts.

Section 2
Introduction

Customer Service

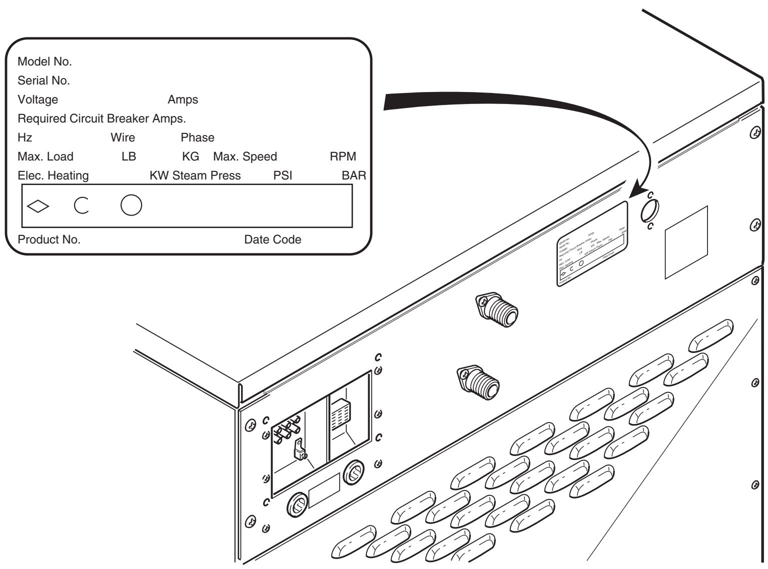
Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

If literature or replacement parts are required, contact the source from whom the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name of the nearest authorized parts distributor.

For technical assistance, call (920) 748-3121.

Nameplate Location

When calling or writing about your product, be sure to mention model and serial numbers. Model and serial numbers are located on nameplate(s) as shown.



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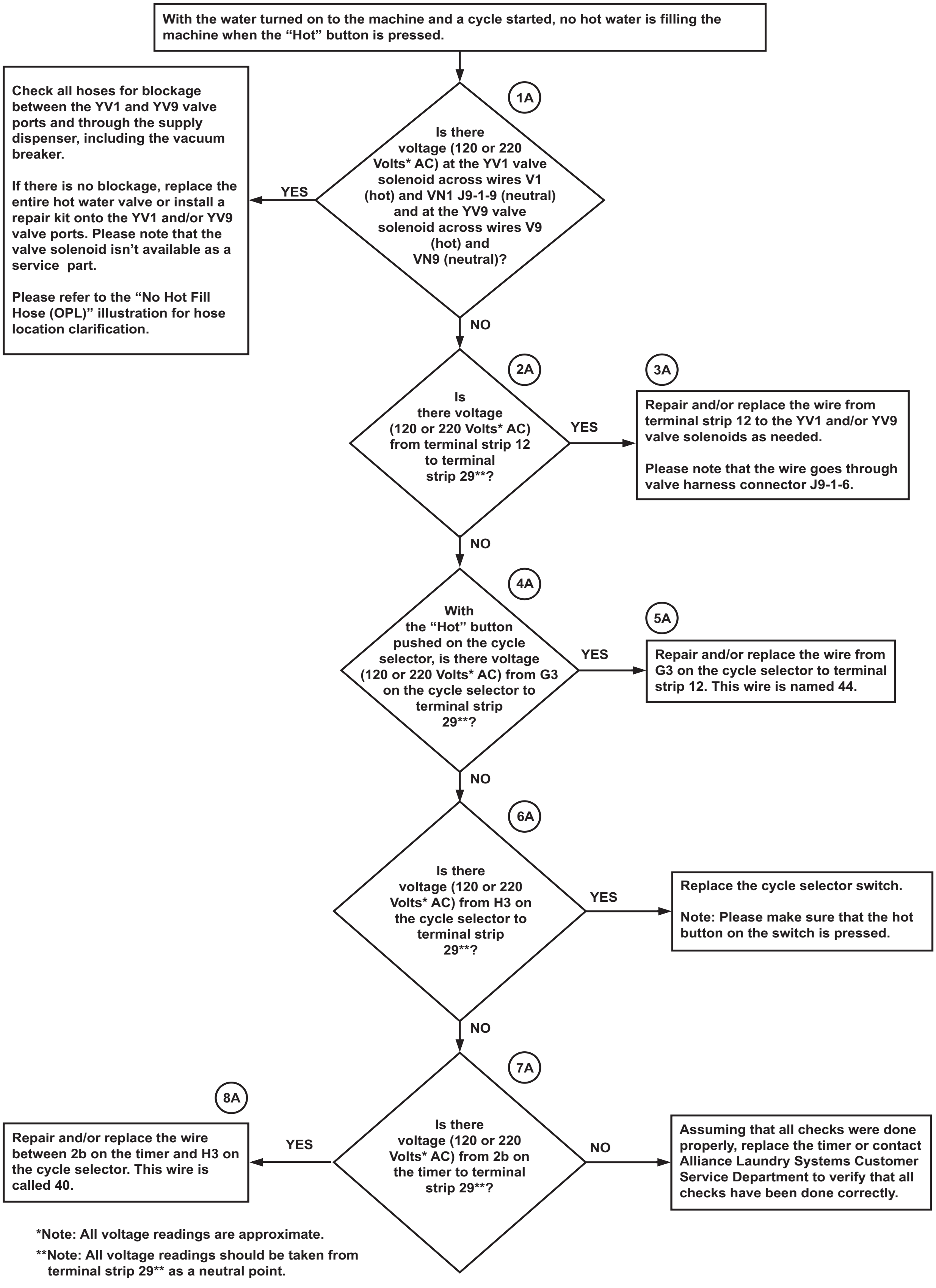
Model Identification

Information in this manual is applicable to these washer-extractors.

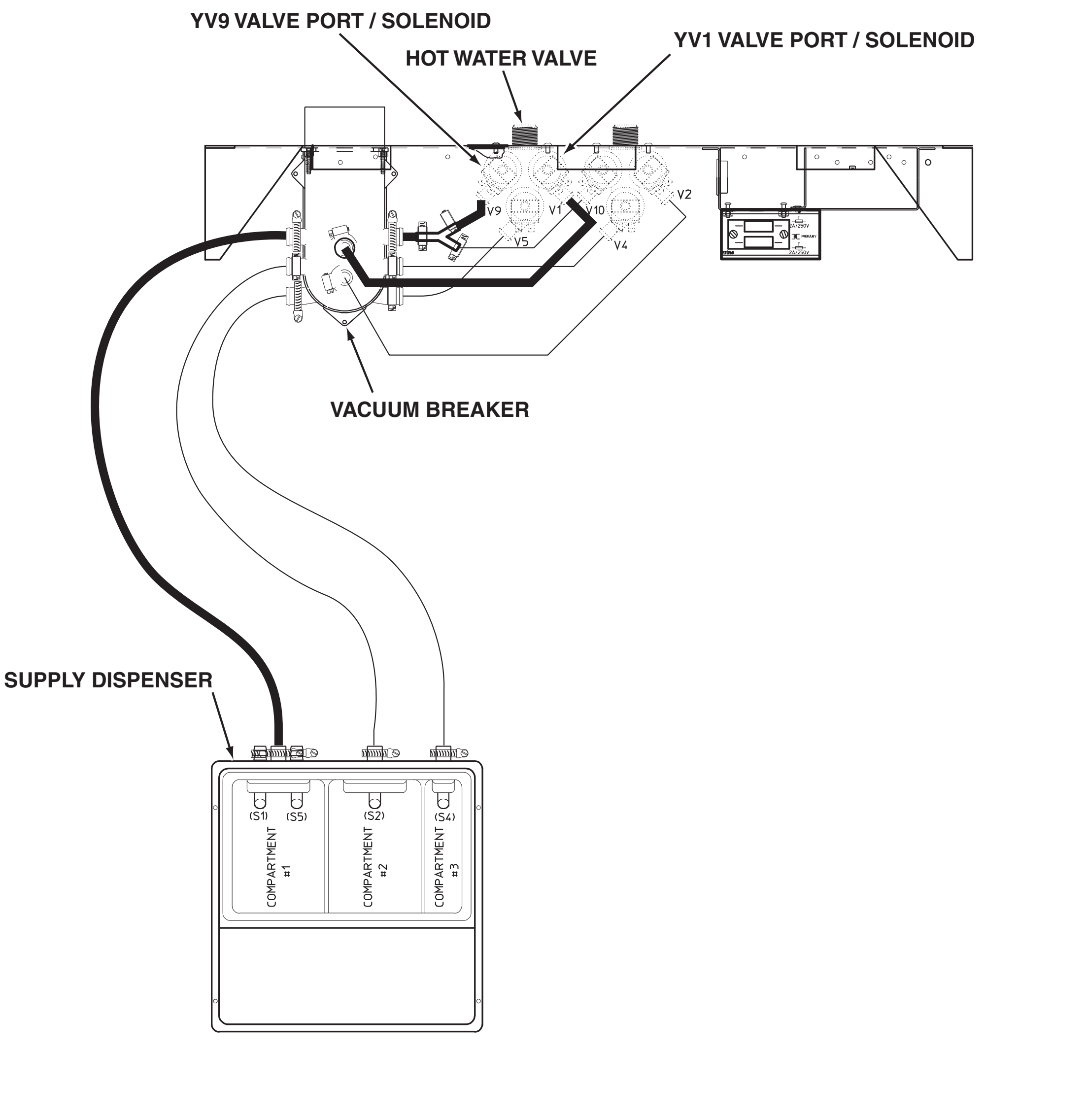
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Section 3
Troubleshooting

1. No Hot Fill Analysis (OPL)

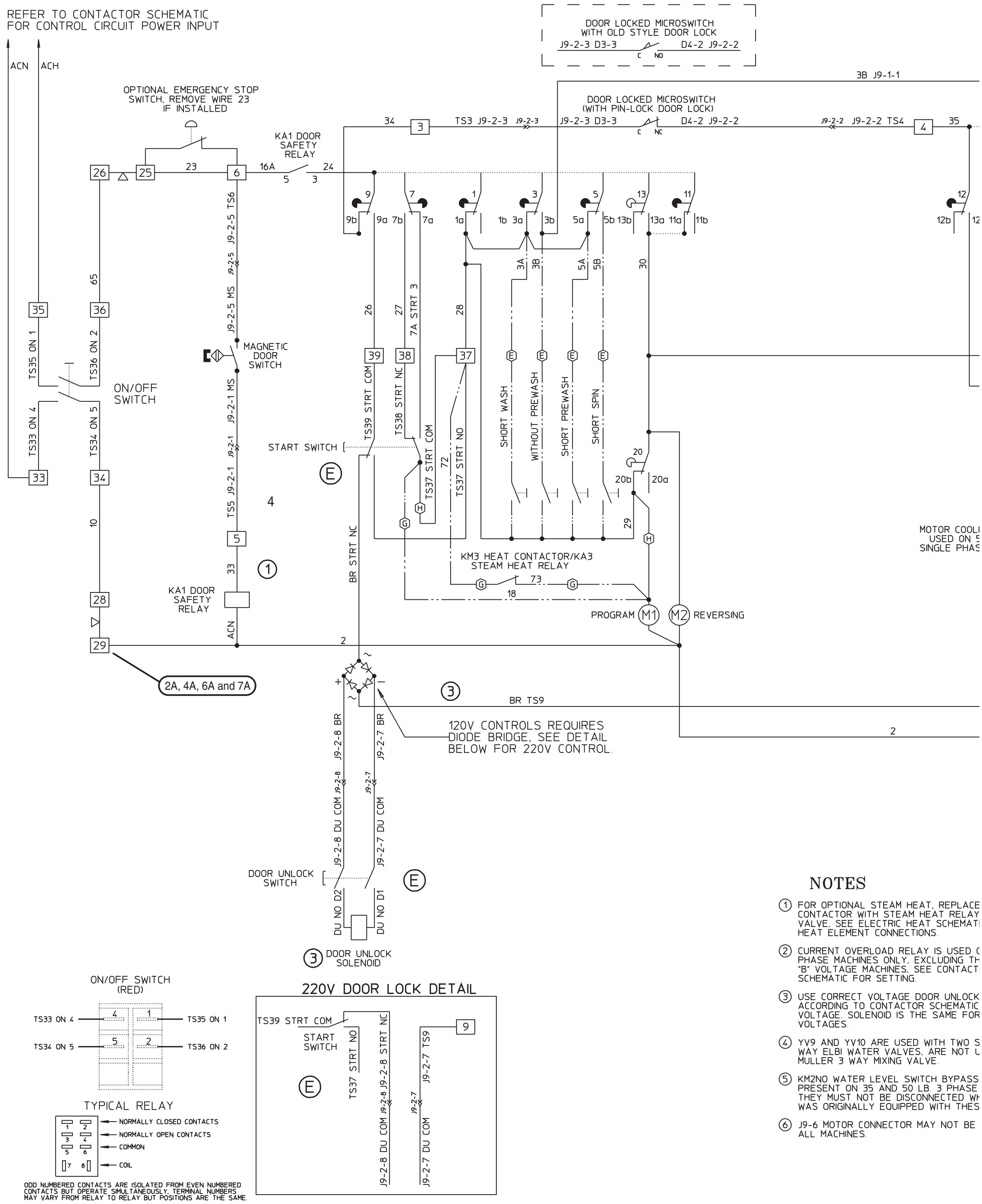


No Hot Fill Hose (OPL) Illustration



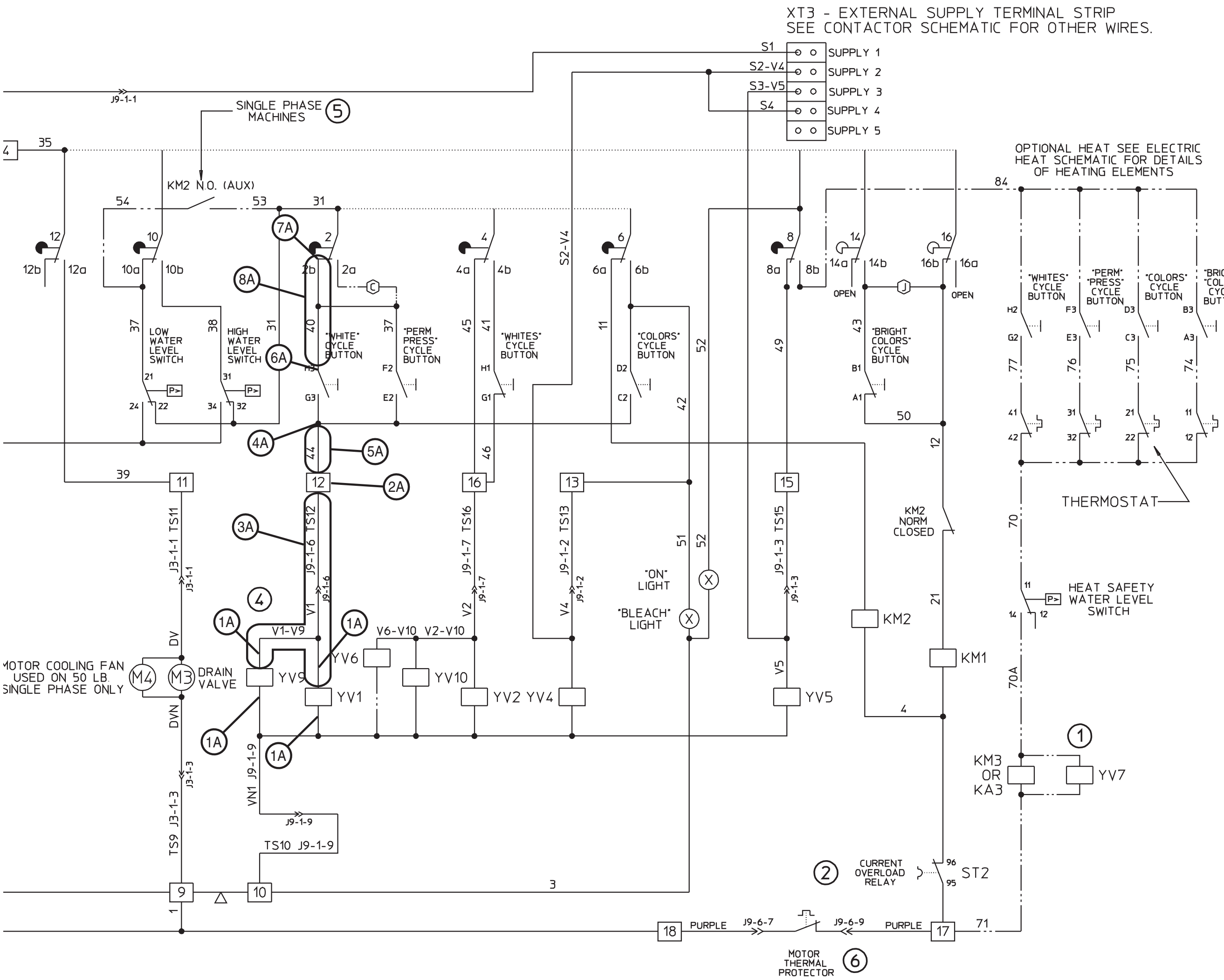
Please refer to the following 2 pages for wiring diagram information.

No Hot Fill Analysis (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Hot Fill Analysis (OPL) (Sheet 2 of 2)



KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

AT, REPLACE HEAT
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OOR UNLOCK CONFIGURATION
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NNECTED WHEN MACHINE
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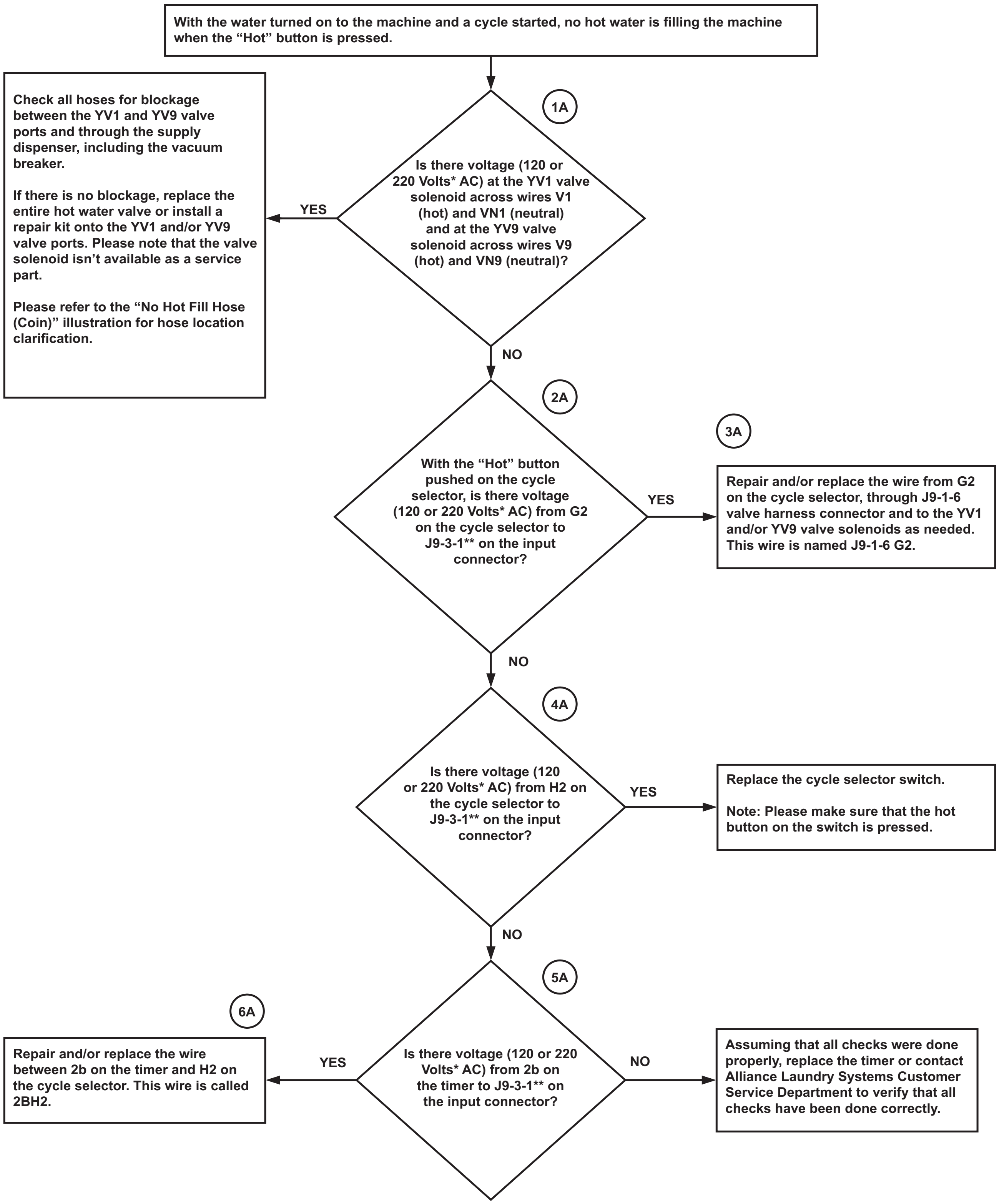
AY NOT BE PRESENT ON

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

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2. No Hot Fill Analysis (Coin)

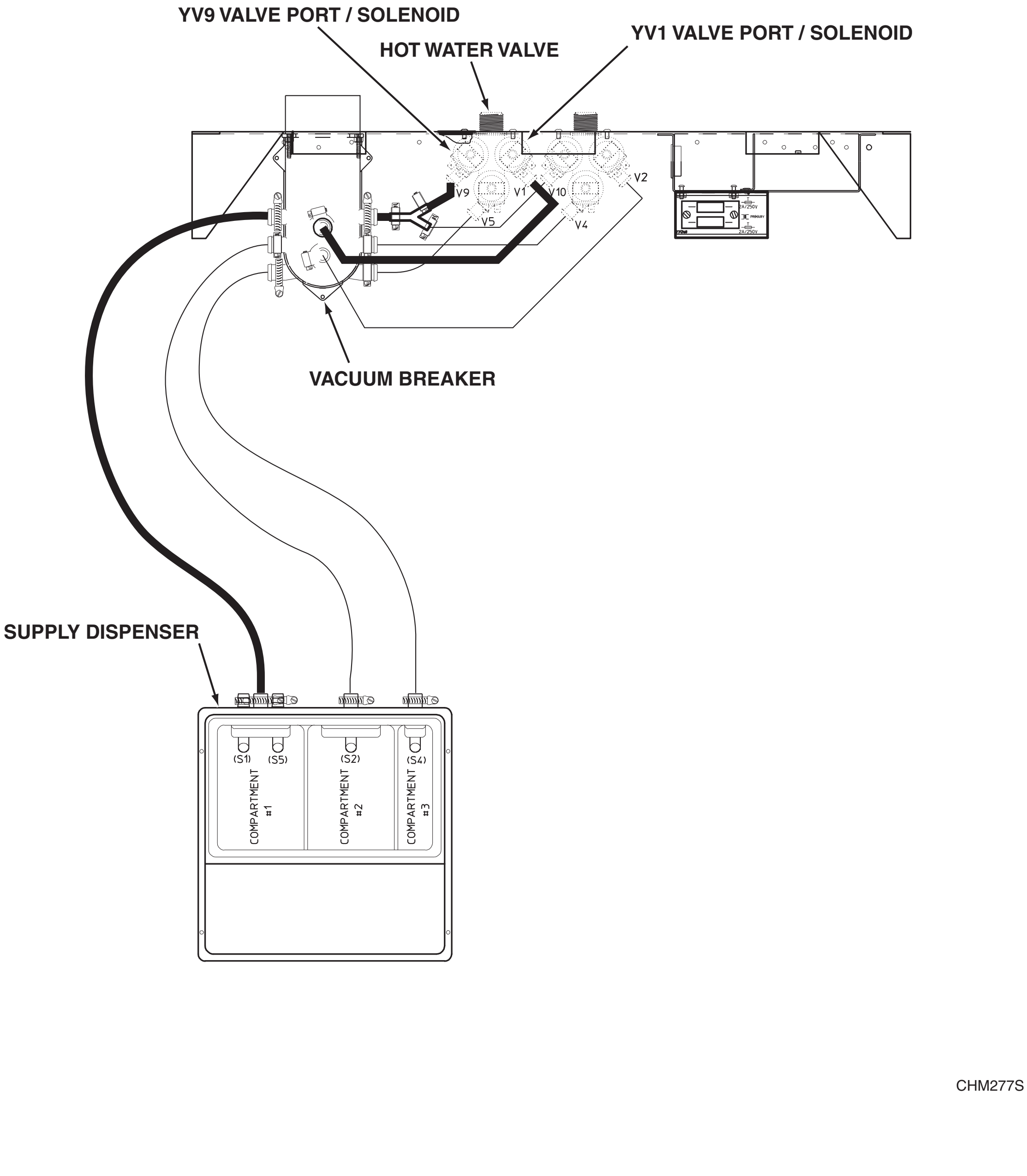


*Note: All voltage readings are approximate.

**Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.

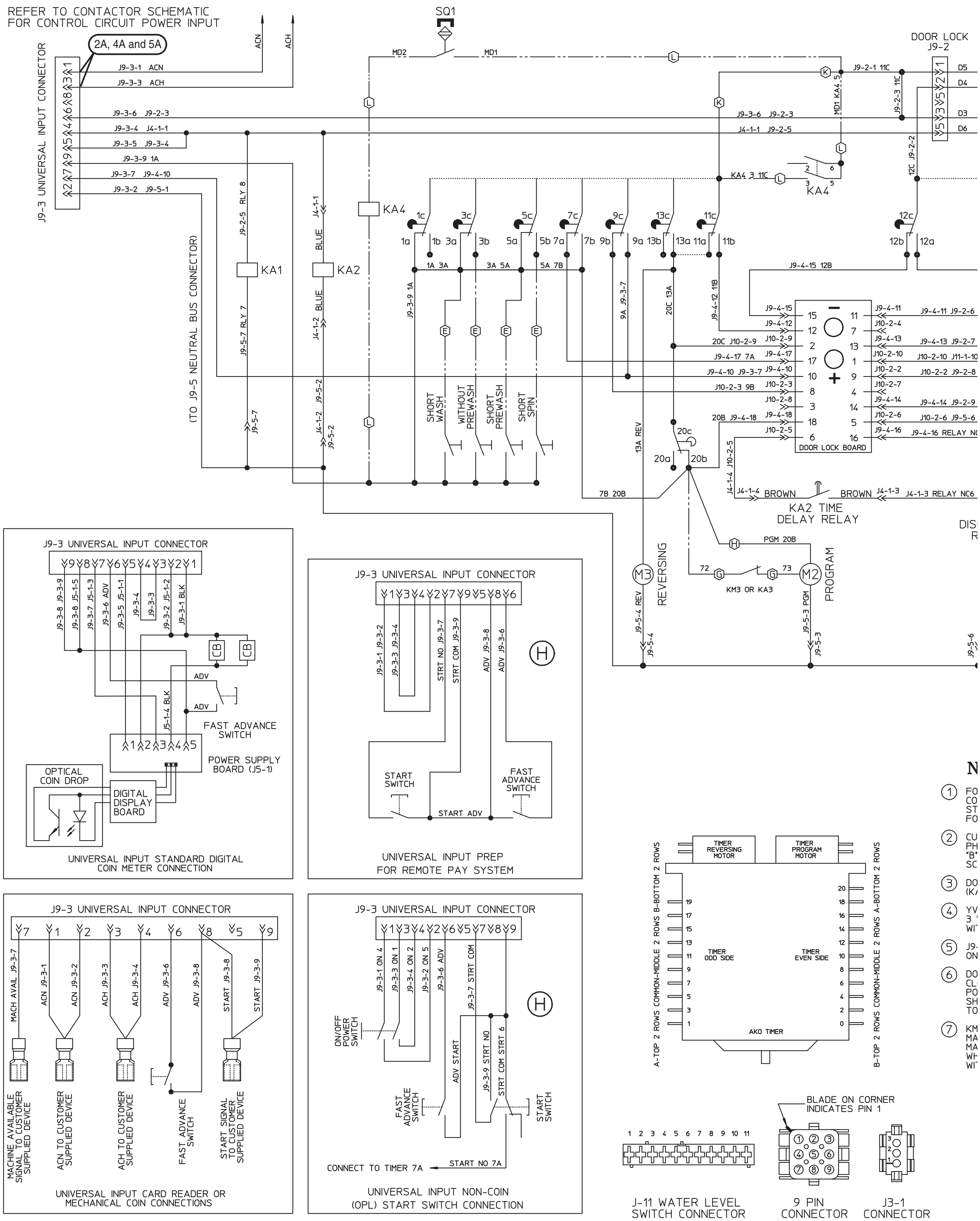
CHM514S

No Hot Fill Hose (Coin) Illustration



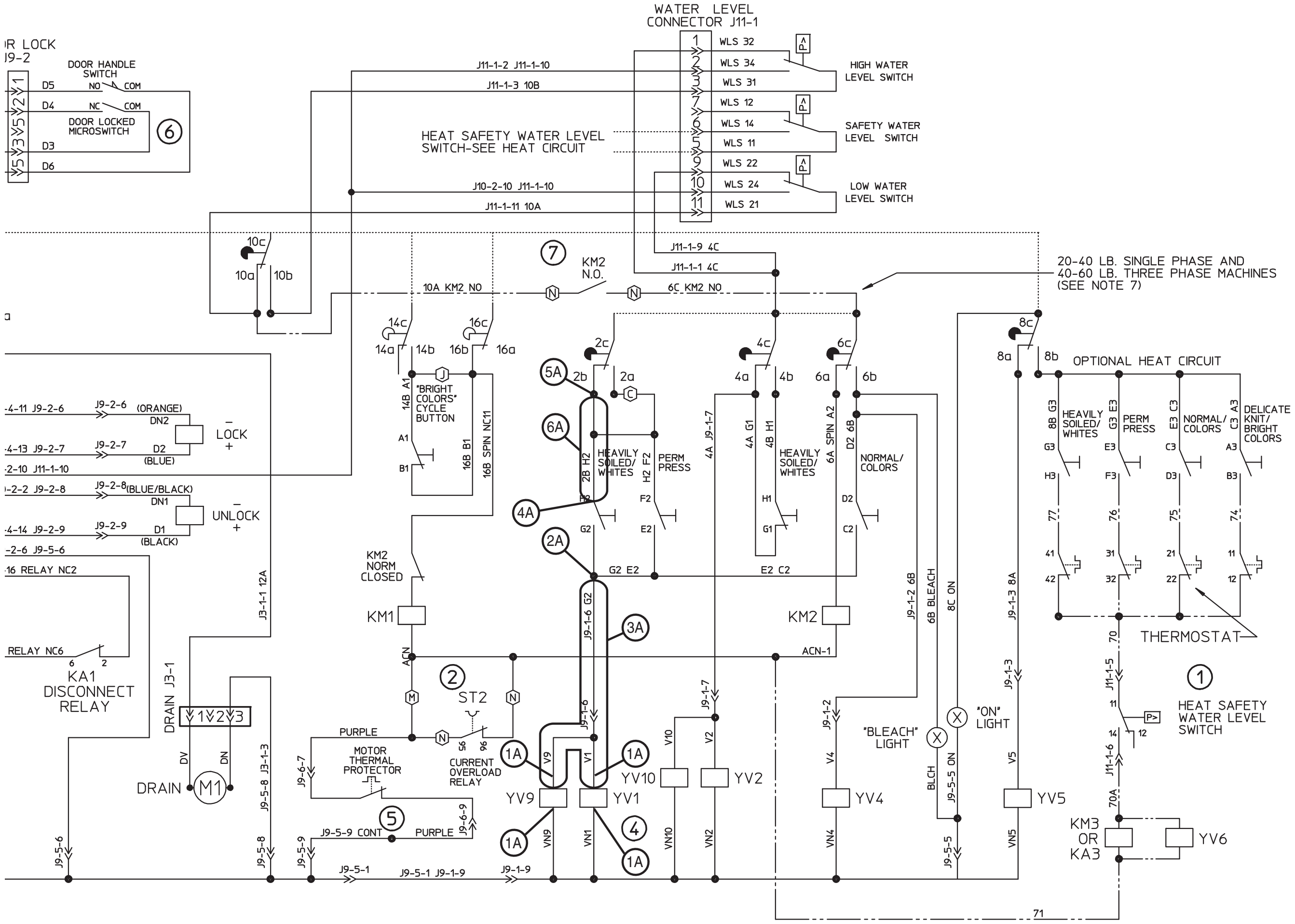
Please refer to the following 2 pages for wiring diagram information.

No Hot Fill Analysis (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Hot Fill Analysis (Coin) (Sheet 2 of 2)



NOTES

1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- (C) CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- (E) NOT FACTORY INSTALLED
- (G) ADD CONNECTION FOR HEAT
- (H) REMOVE CONNECTION FOR HEAT
- (J) REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- (K) REMOVE CONNECTION FOR CE MARK OPTION
- (L) ADD CONNECTION FOR CE MARK OPTION
- (M) CONNECTION FOR 3 PHASE MACHINES
- (N) CONNECTION FOR SINGLE PHASE MACHINES

J9-5-1 CONNECTOR/PIN NUMBER
J9-5(CONNECTOR #)-1(PIN #)

REVERSING TIMER CONTACTS FOR WASH AGITATION

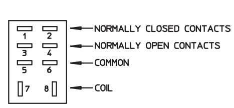
PROGRAM TIMER CONTACTS

CONNECTIONS INTERNAL TO DEVICE

OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

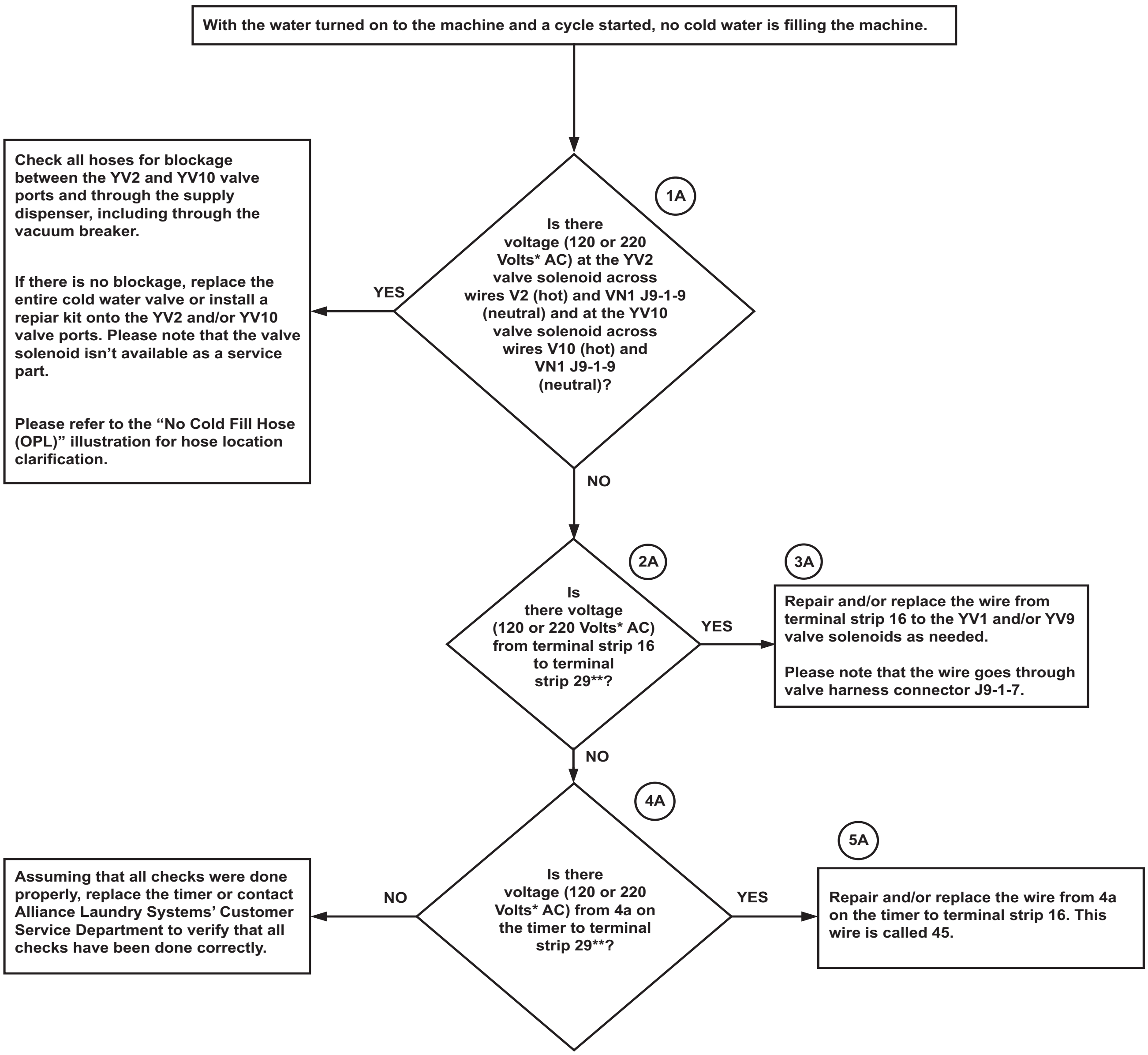
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

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3. No Cold Fill Analysis (OPL)

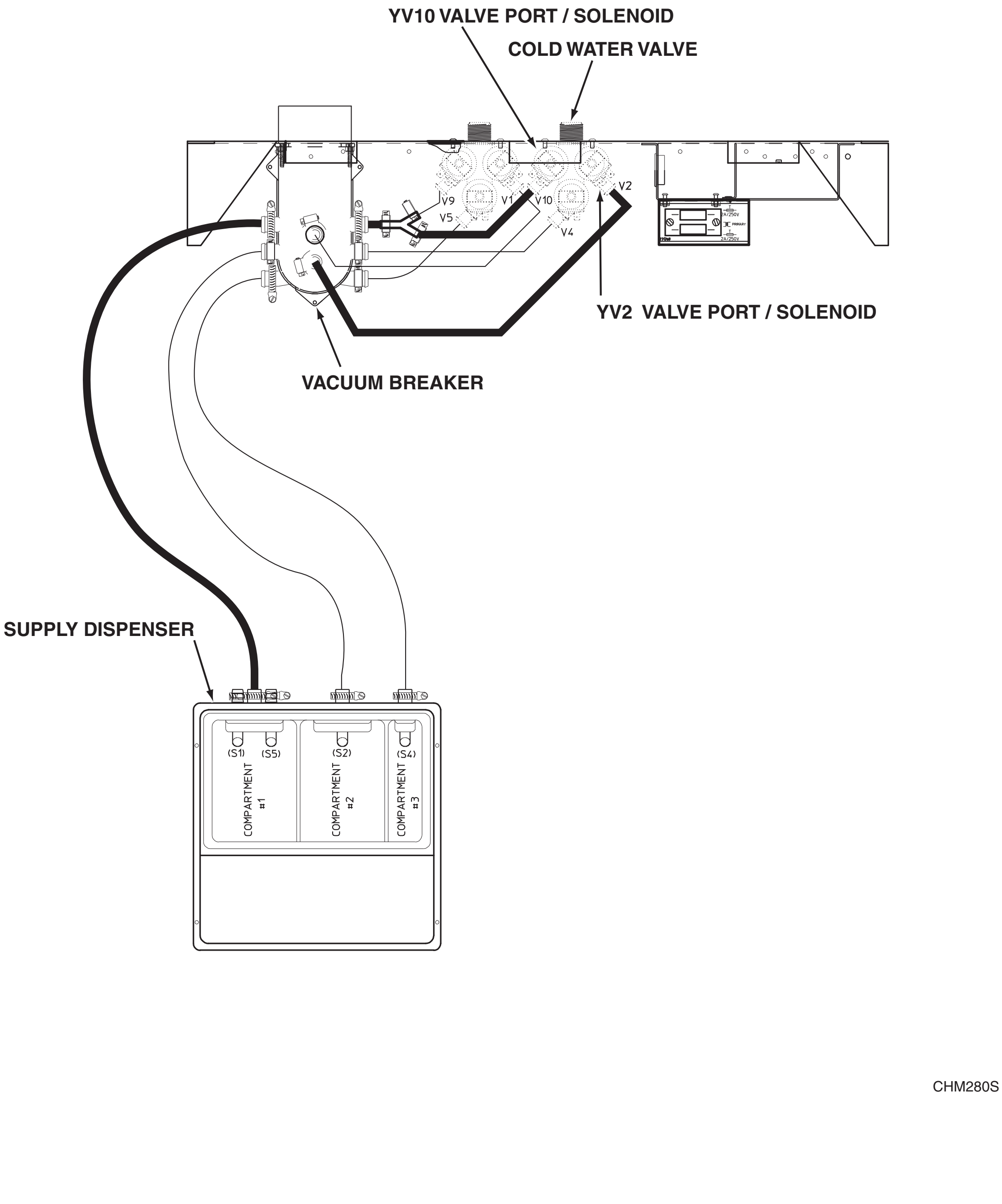


*Note: All voltage readings are approximate.

** Note: All voltage readings should be taken from terminal strip 29** as a neutral point.

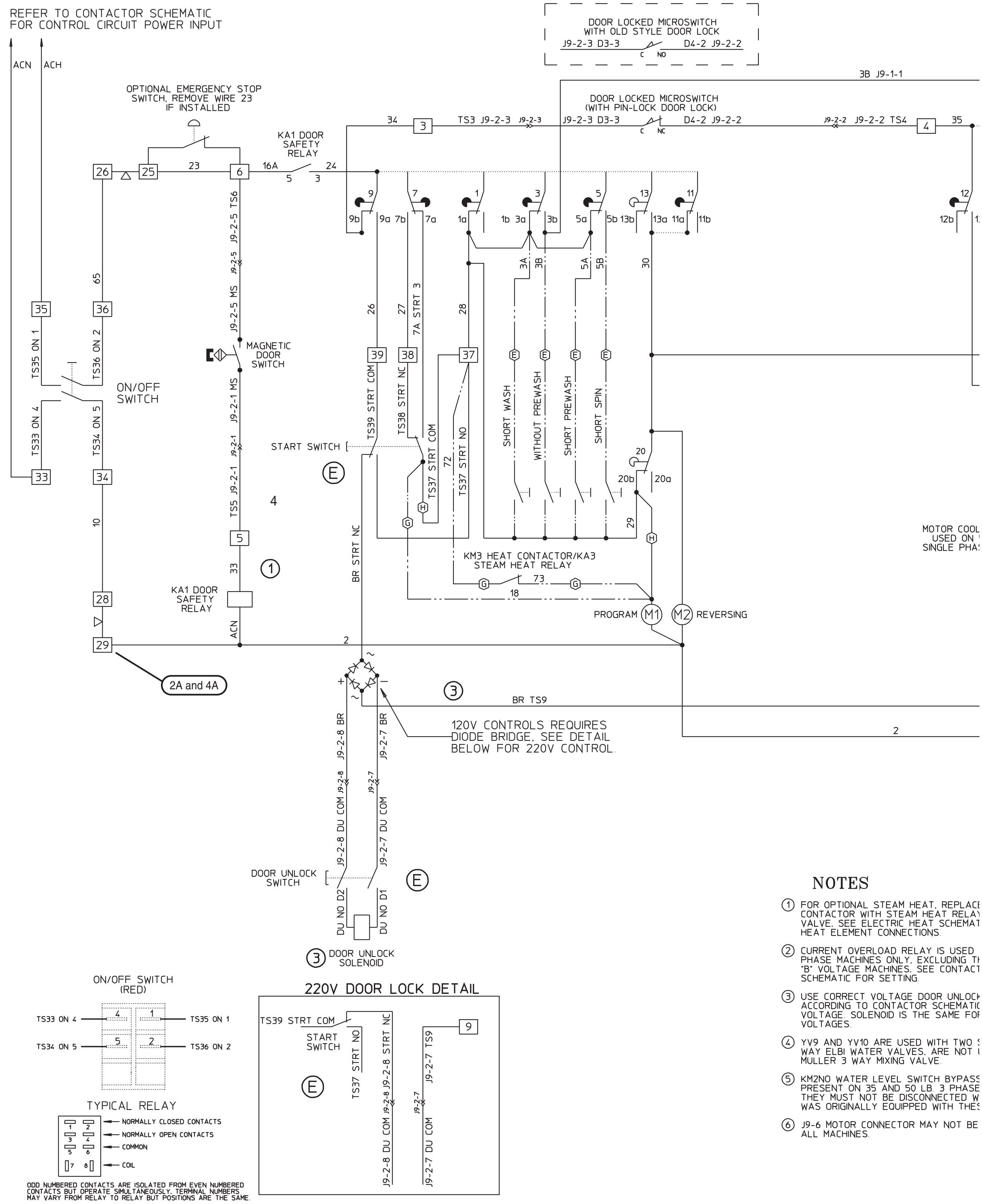
CHM515S

No Cold Fill Hose (OPL) Illustration



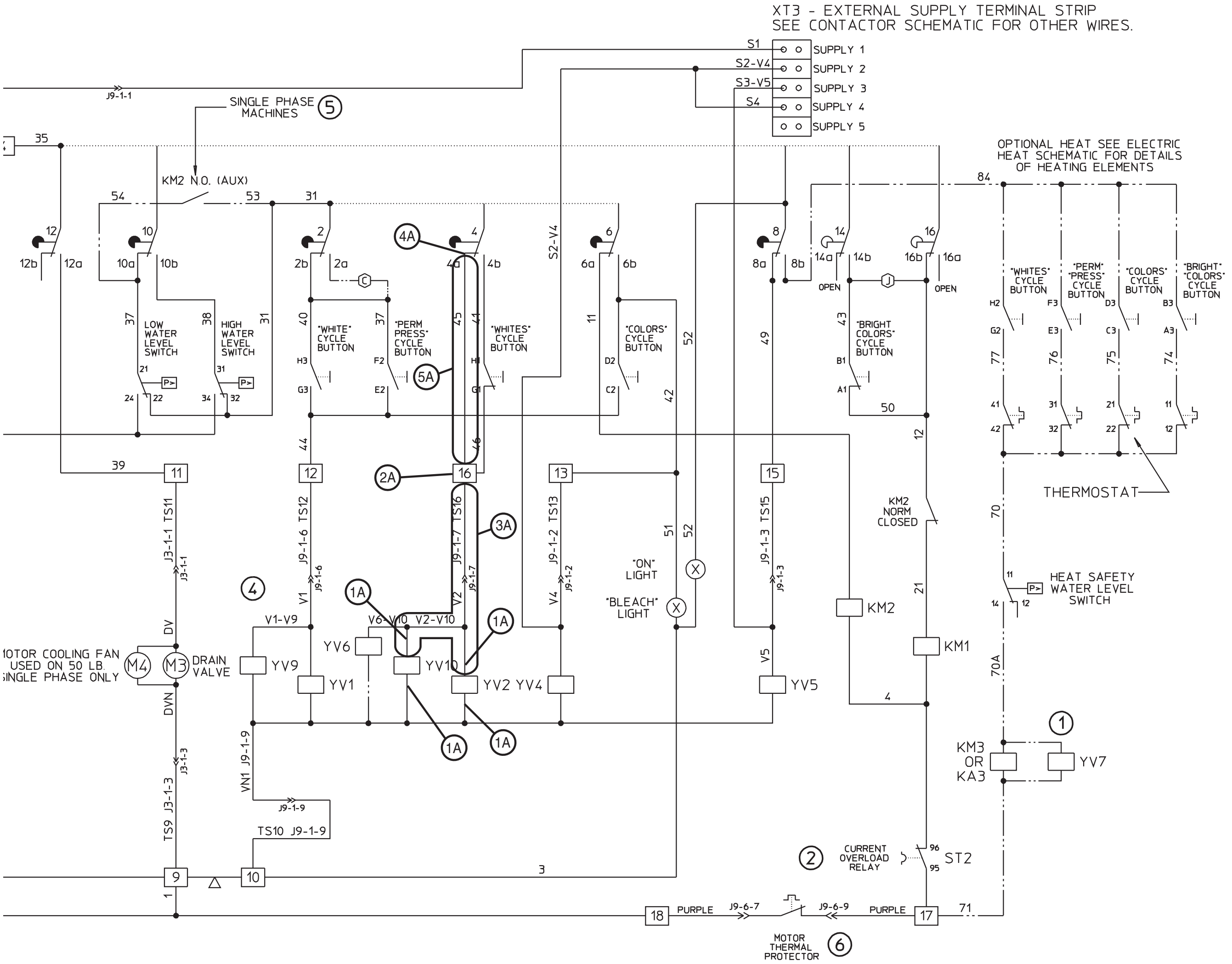
Please refer to the following 2 pages for wiring diagram information.

No Cold Fill Analysis (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Cold Fill Analysis (OPL) (Sheet 2 of 2)



.T, REPLACE HEAT
IEAT RELAY AND STEAM
.T SCHEMATIC FOR
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Y IS USED ON SINGLE
XCLUDING THE 20 LB.
E CONTACTOR

OOR UNLOCK CONFIGURATION
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NNECTED WHEN MACHINE
WITH THESE WIRES.

AY NOT BE PRESENT ON

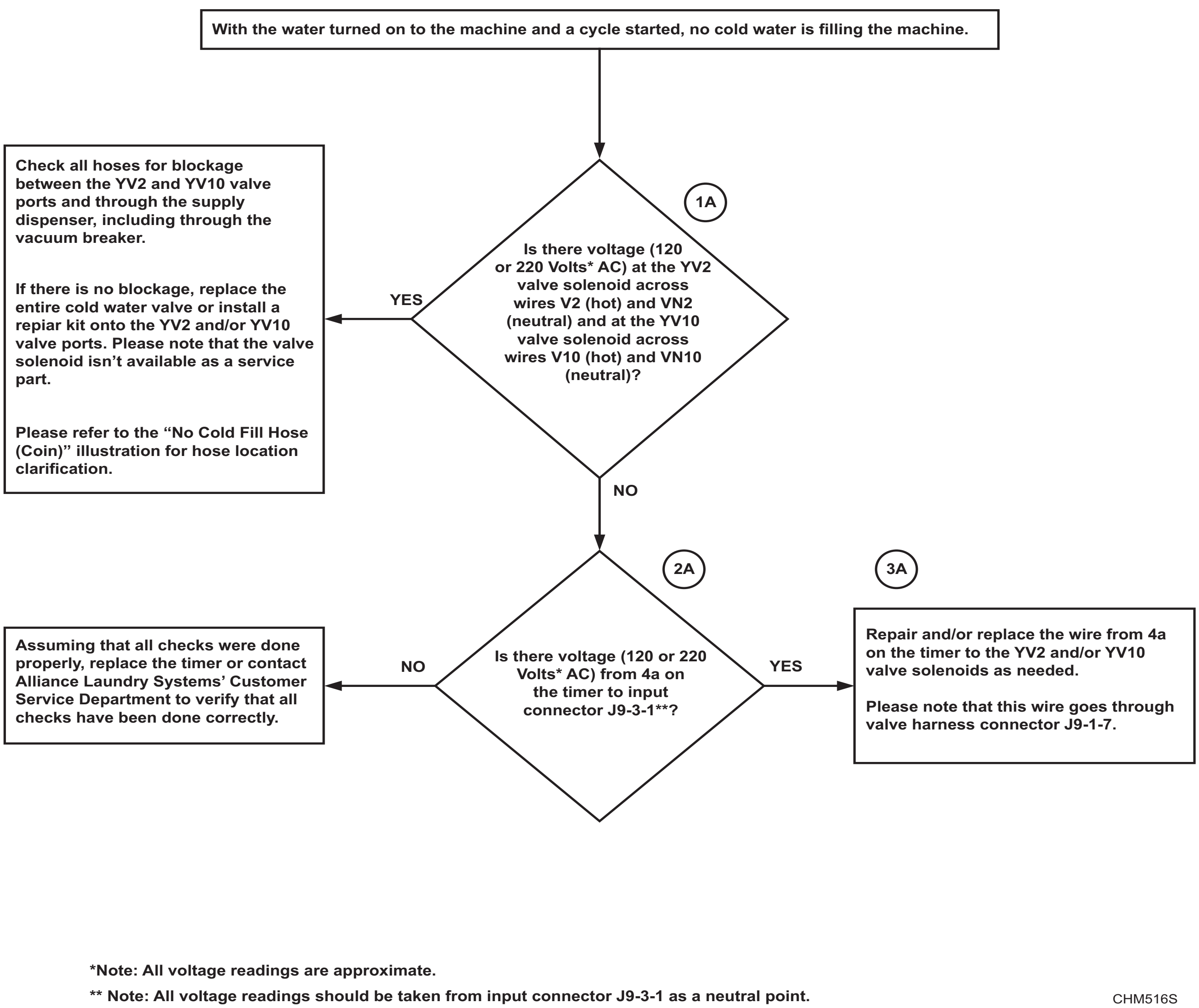
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

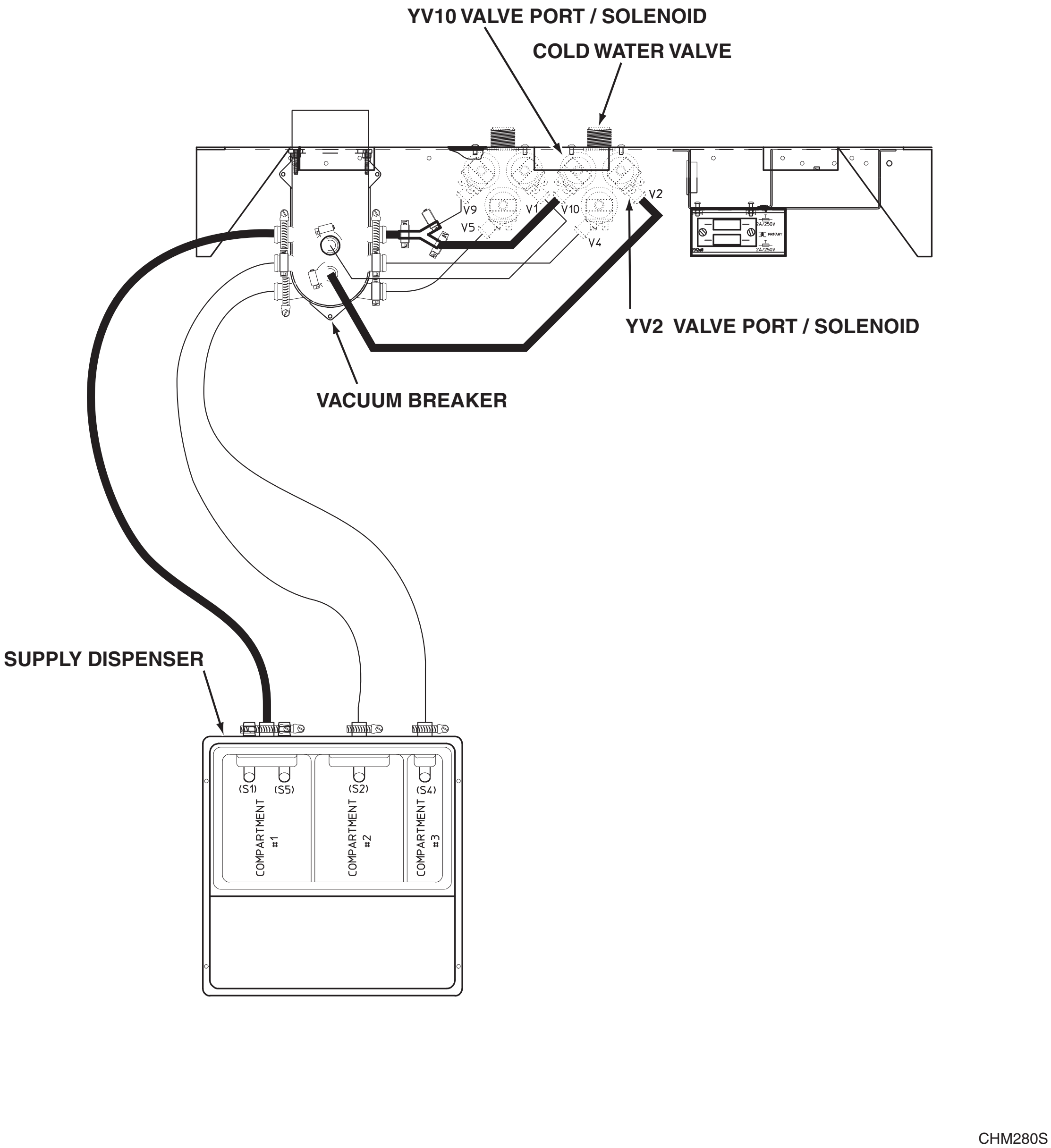
KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
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M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

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4. No Cold Fill Analysis (Coin)

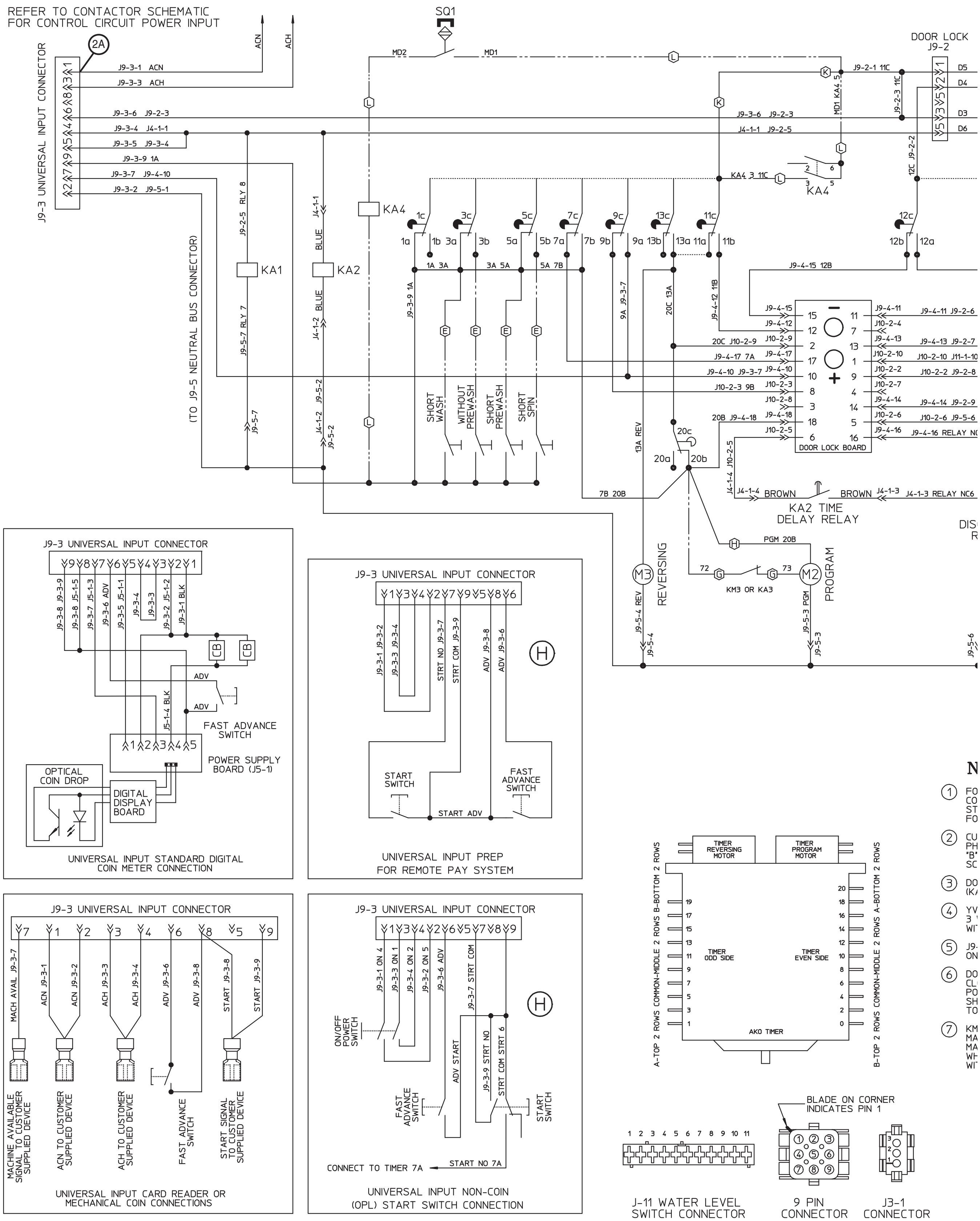


No Cold Fill Hose (Coin) Illustration



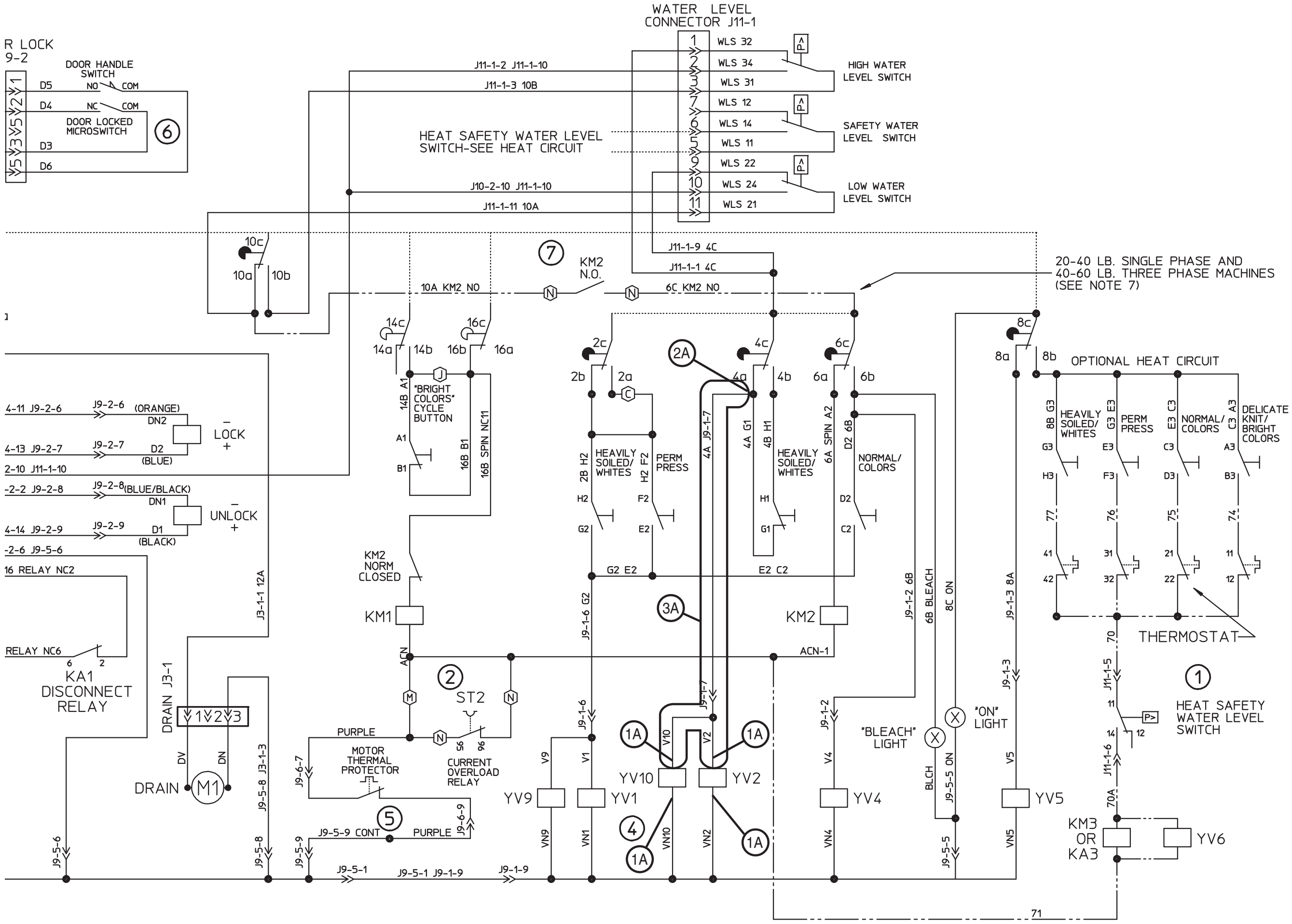
Please refer to the following 2 pages for wiring diagram information.

No Cold Fill Analysis (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Cold Fill Analysis (Coin) (Sheet 2 of 2)



NOTES

1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES

J9-5-1 CONNECTOR/PIN NUMBER
J9-5(CONNECTOR #)-1(PIN #)

REVERSING TIMER CONTACTS FOR WASH AGITATION

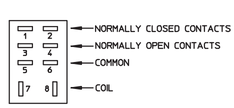
PROGRAM TIMER CONTACTS

CONNECTIONS INTERNAL TO DEVICE

OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

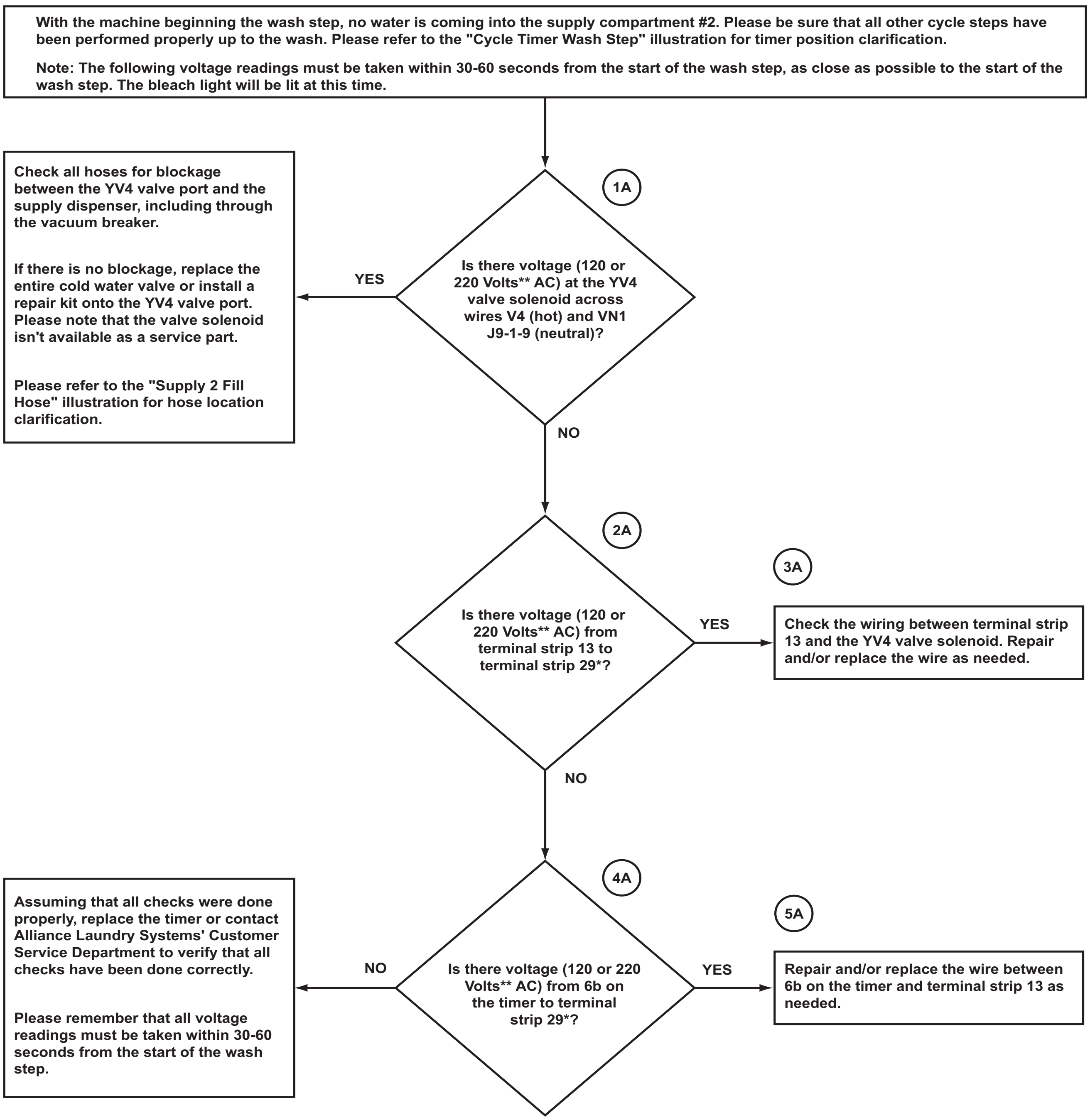
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM279S
0636156(H)

5. No Supply 2 Fill Analysis (OPL)

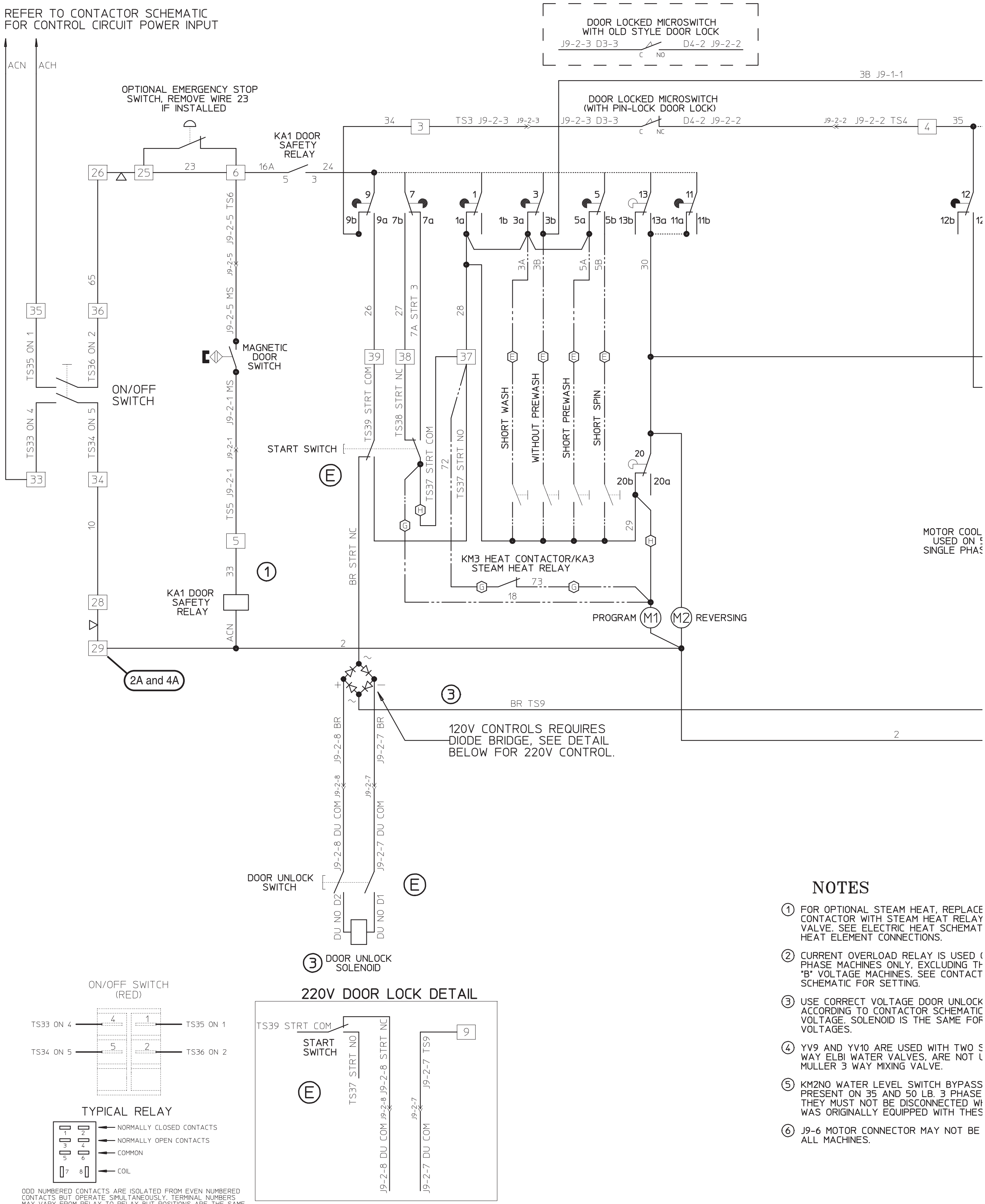


*Note: All voltage readings should be taken from terminal 29 as a neutral point.
**Note: All voltage readings are approximate.

CHM517S

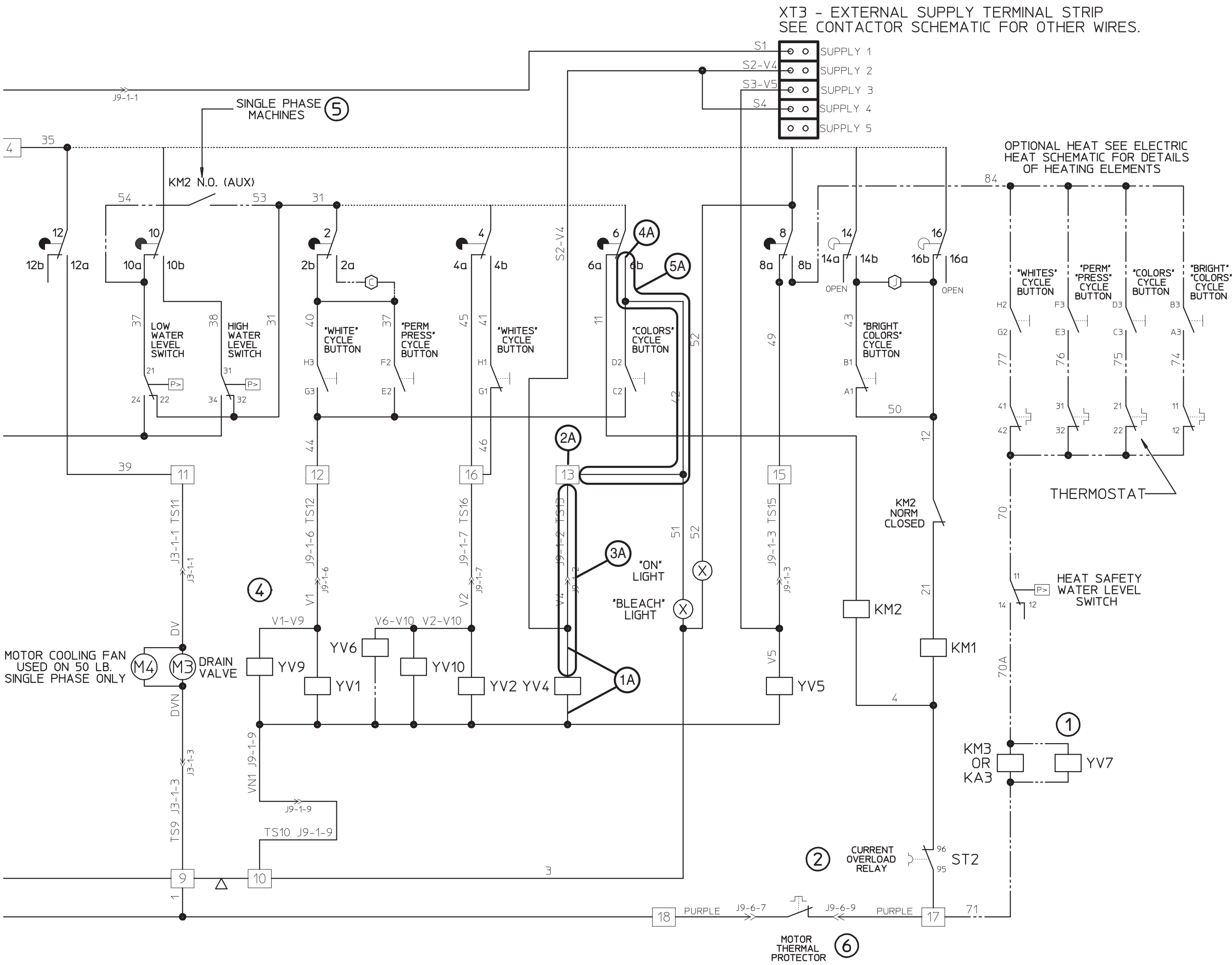
Please refer to the following 2 pages for wiring diagram information.

No Supply 2 Fill Analysis (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Supply 2 Fill Analysis (OPL) (Sheet 2 of 2)



AT, REPLACE HEAT
HEAT RELAY AND STEAM
AT SCHEMATIC FOR
ONS.

AY IS USED ON SINGLE
EXCLUDING THE 20 LB.
EE CONTACTOR

DOOR UNLOCK CONFIGURATION
R SCHEMATIC CONTROL
HE SAME FOR BOTH

WITH TWO SEPARATE 3
, ARE NOT USED WITH
LVE.

ITCH BYPASS WIRES MAY BE
LB. 3 PHASE MACHINES.
ONNECTED WHEN MACHINE
D WITH THESE WIRES.

MAY NOT BE PRESENT ON

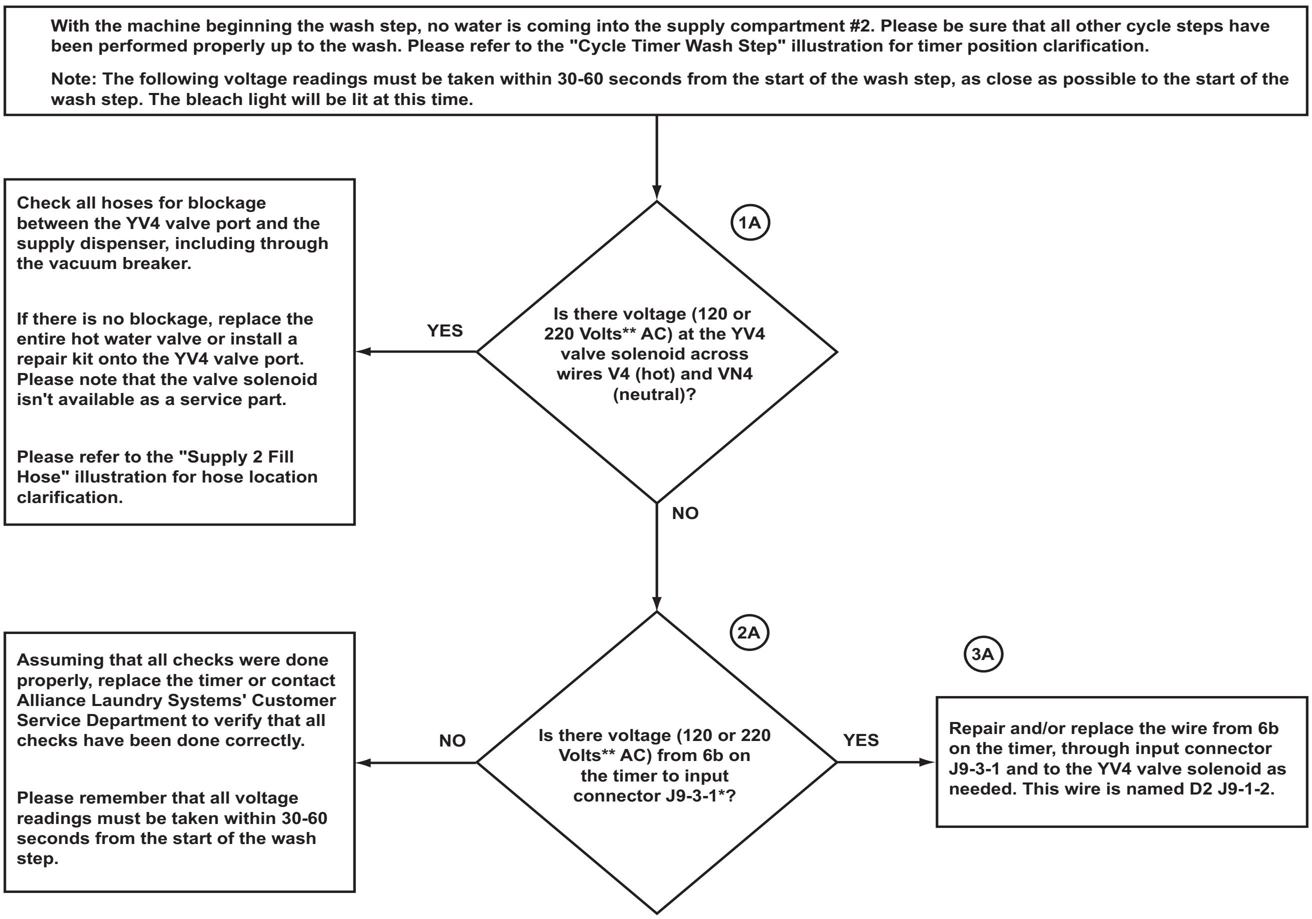
LEGEND

- (C) CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- (E) NOT FACTORY INSTALLED
- (G) ADD CONNECTION FOR HEAT
- (H) REMOVE CONNECTION FOR HEAT
- (J) REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- [32] TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- [RC] RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

CHM274S
0635913(E)

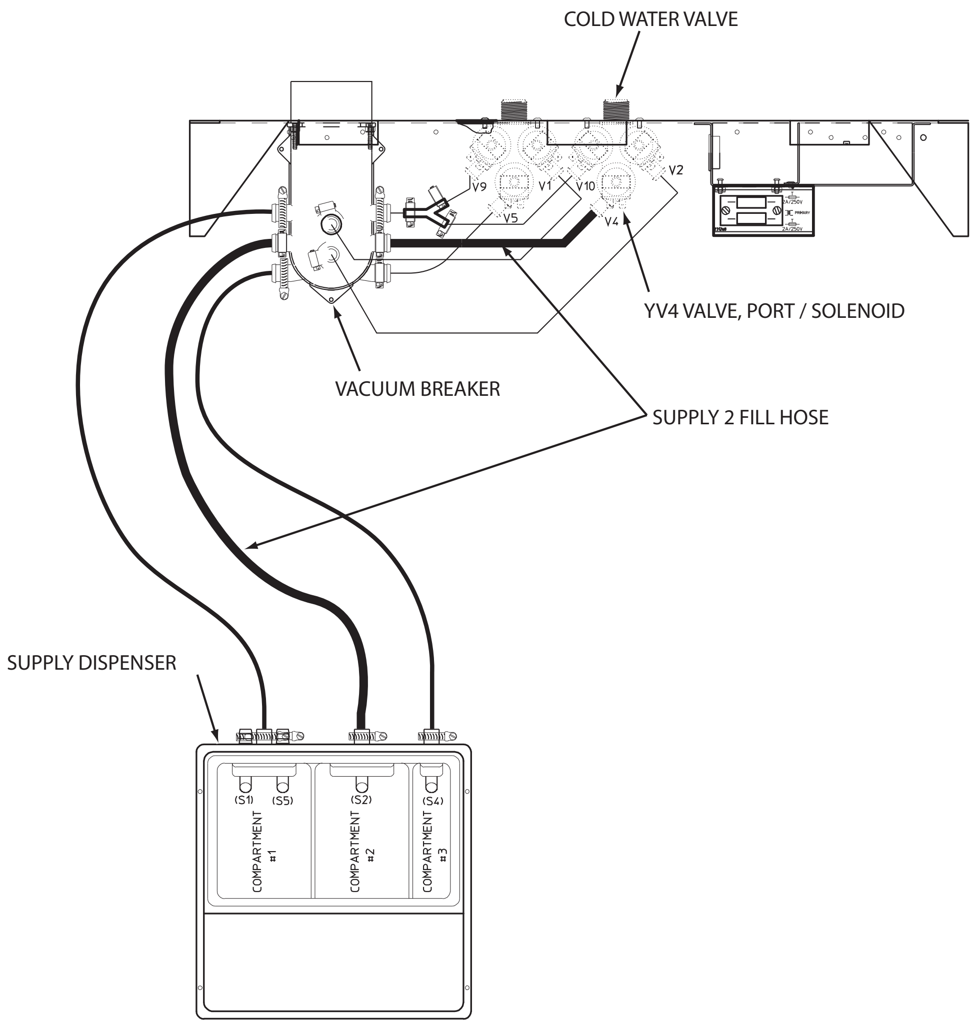
6. No Supply 2 Fill Analysis (Coin)



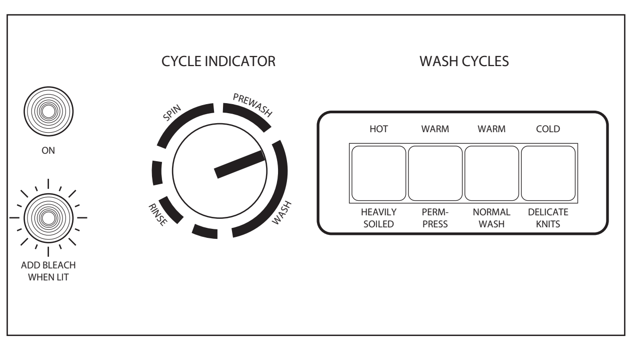
*Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.
**Note: All voltage readings are approximate.

CHM518S

Supply 2 Fill Hose Illustration



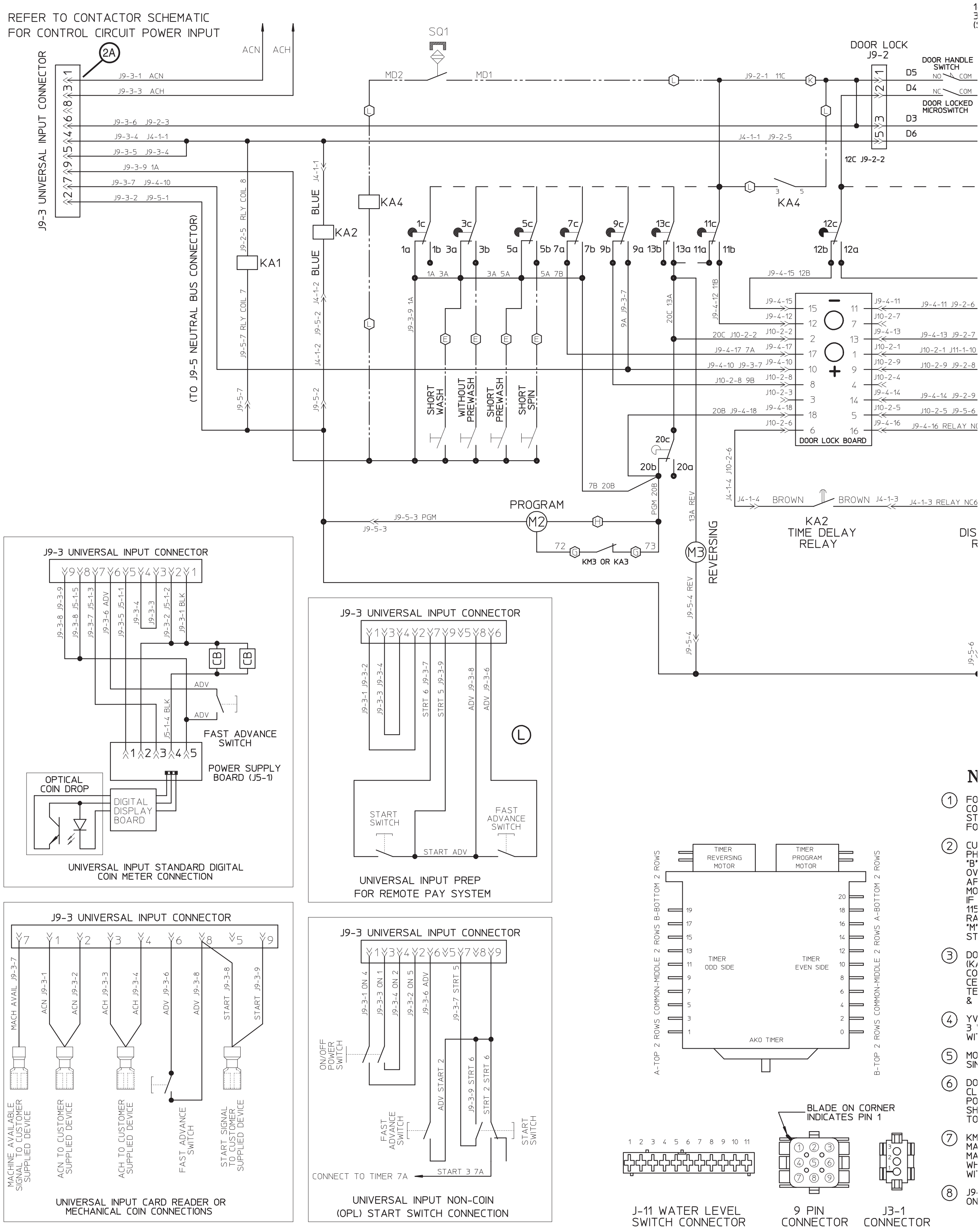
Cycle Timer Wash Step Illustration



CHM273S
0635860(G)

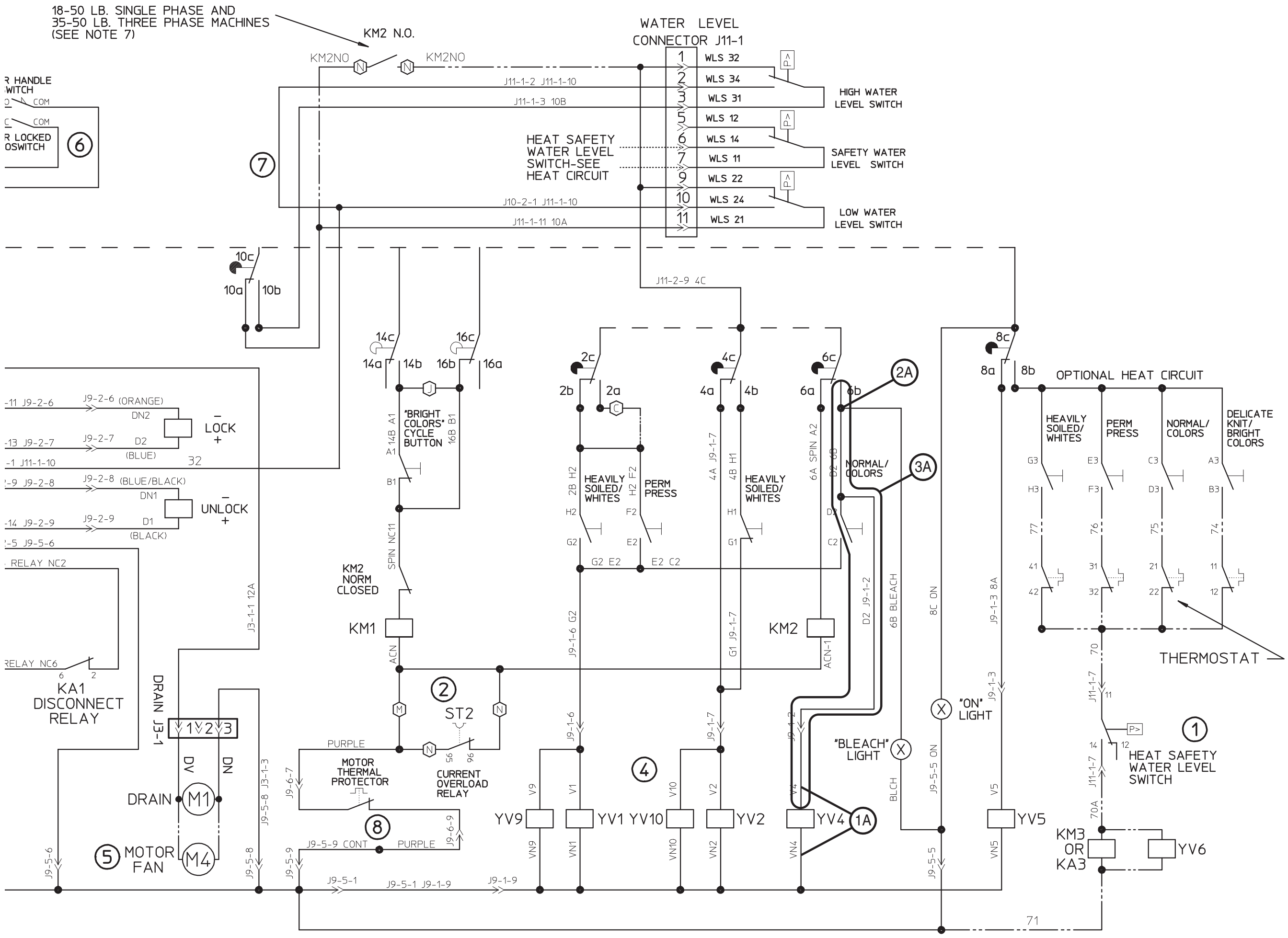
Please refer to the following 2 pages for wiring diagram information.

No Supply 2 Fill Analysis (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Supply 2 Fill Analysis (Coin) (Sheet 2 of 2)



NOTES

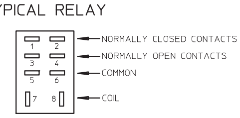
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 18 LB. "B" AND "E" VOLTAGE MACHINES. ST2 CURRENT OVERLOAD RELAY MUST BE SET TO "TRIP" AT APPROPRIATE CURRENT LOAD. SET DIAL TO MOTOR NAMEPLATE FULL LOAD CURRENT RATING. IF MOTOR HAS SERVICE FACTOR OF LESS THAN 115, SET DIAL TO 90% OF FULL LOAD CURRENT RATING. ALSO SET OPERATING MODE DIAL TO "M" (MANUAL RESET) TO PREVENT ACCIDENTAL STARTING OF MOTOR.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY. CONNECT WIRE "D6" TO DOOR SAFETY RELAY FOR CE UNITS, OTHERWISE CONNECT WIRE D6 TO TERMINAL STRIP TERM #6 WHEN MAGNETIC SWITCH & SAFETY RELAY ARE NOT USED.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. MOTOR COOLING FAN IS ONLY USED ON 50LB. SINGLE PHASE MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 35 AND 50 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.
8. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- — — — CONNECTIONS INTERNAL TO DEVICE
- ——·—·— OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR
M4 - OPTIONAL MOTOR FAN *C50 1Ø

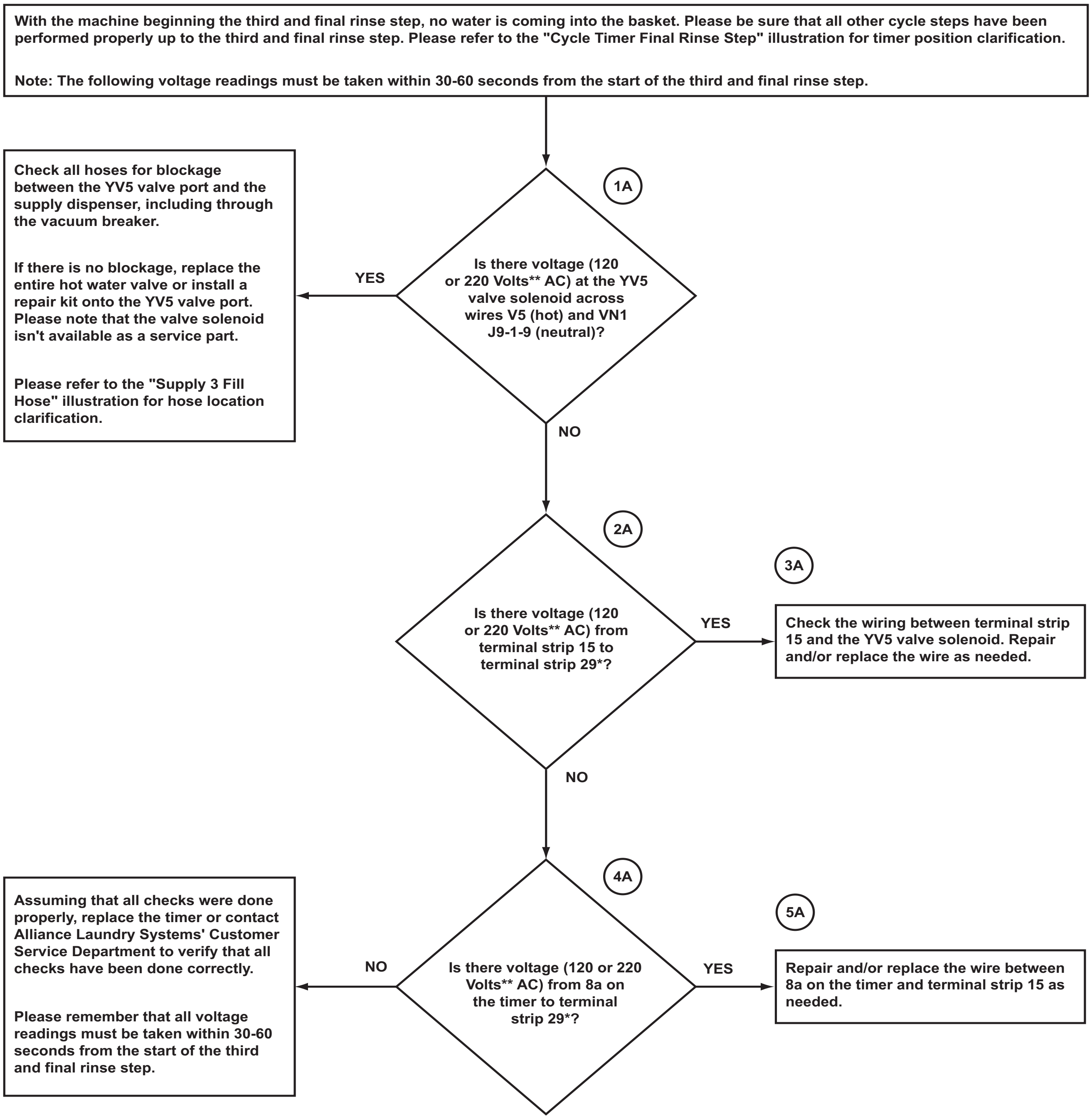
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM271S
0634311(I)

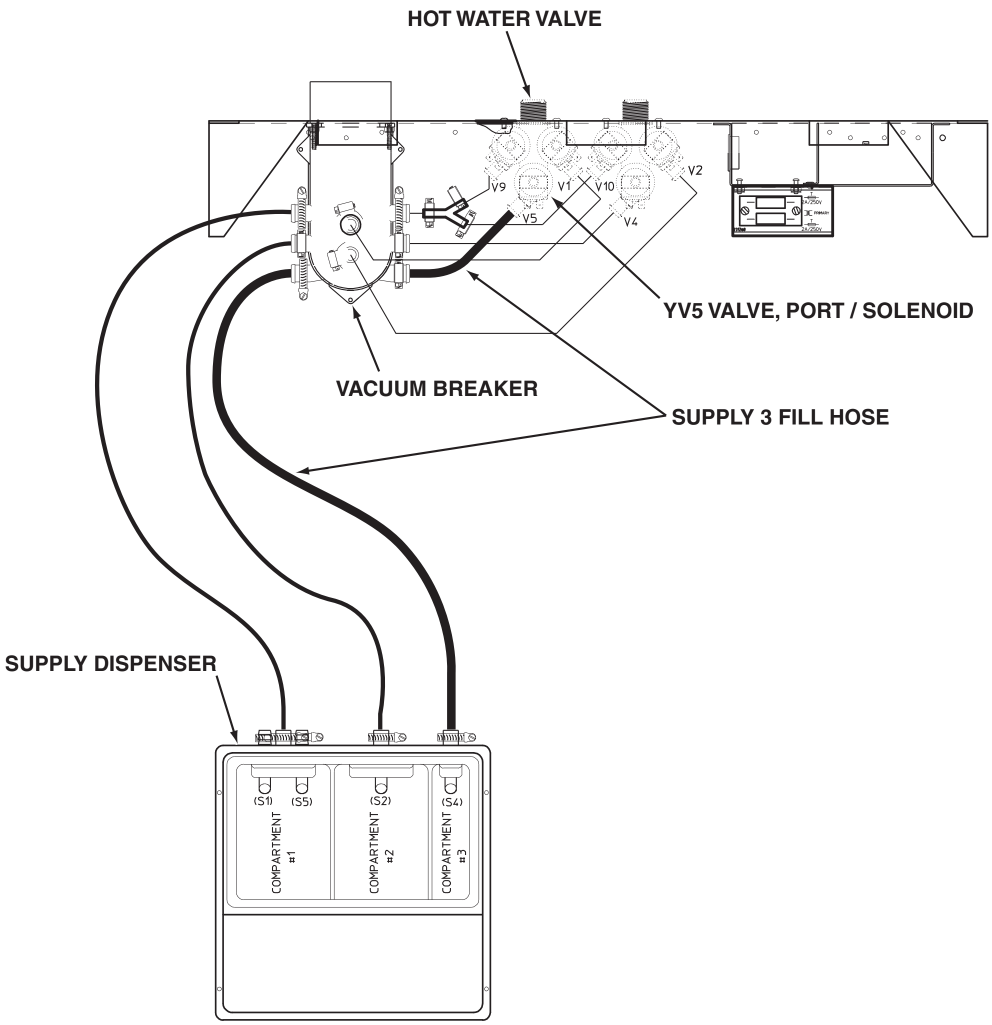
7. No Supply 3 Fill Analysis (OPL)



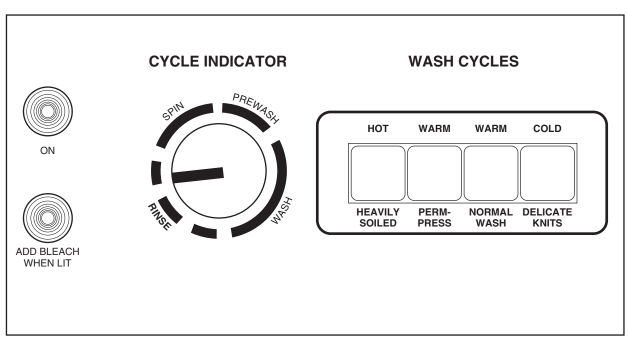
*Note: All voltage readings should be taken from terminal 29 as a neutral point.
**Note: All voltage readings are approximate.

CHM519S

Supply 3 Fill Hose Illustration



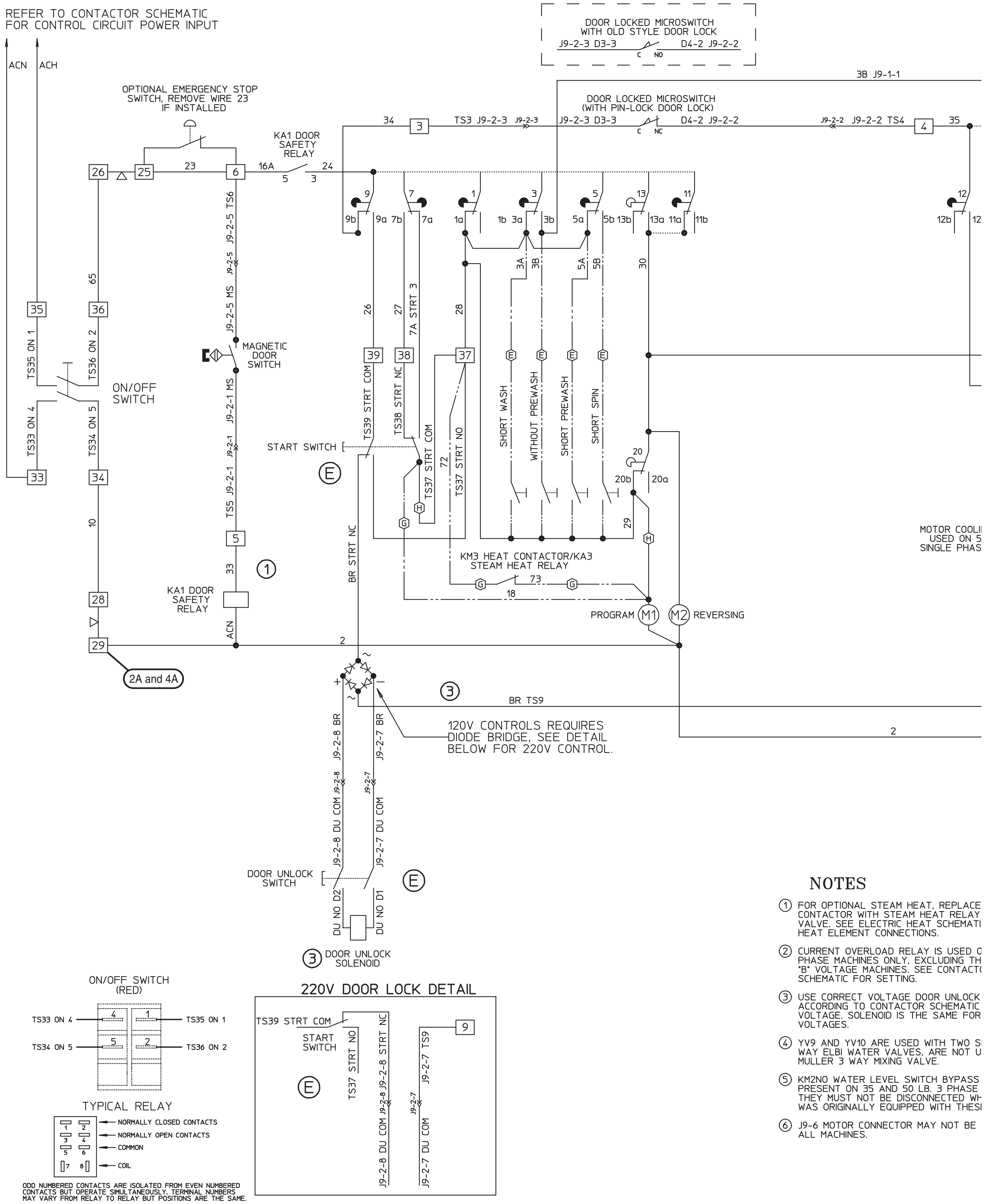
Cycle Timer Final Rinse Step Illustration



CHM268S
0635860(G)

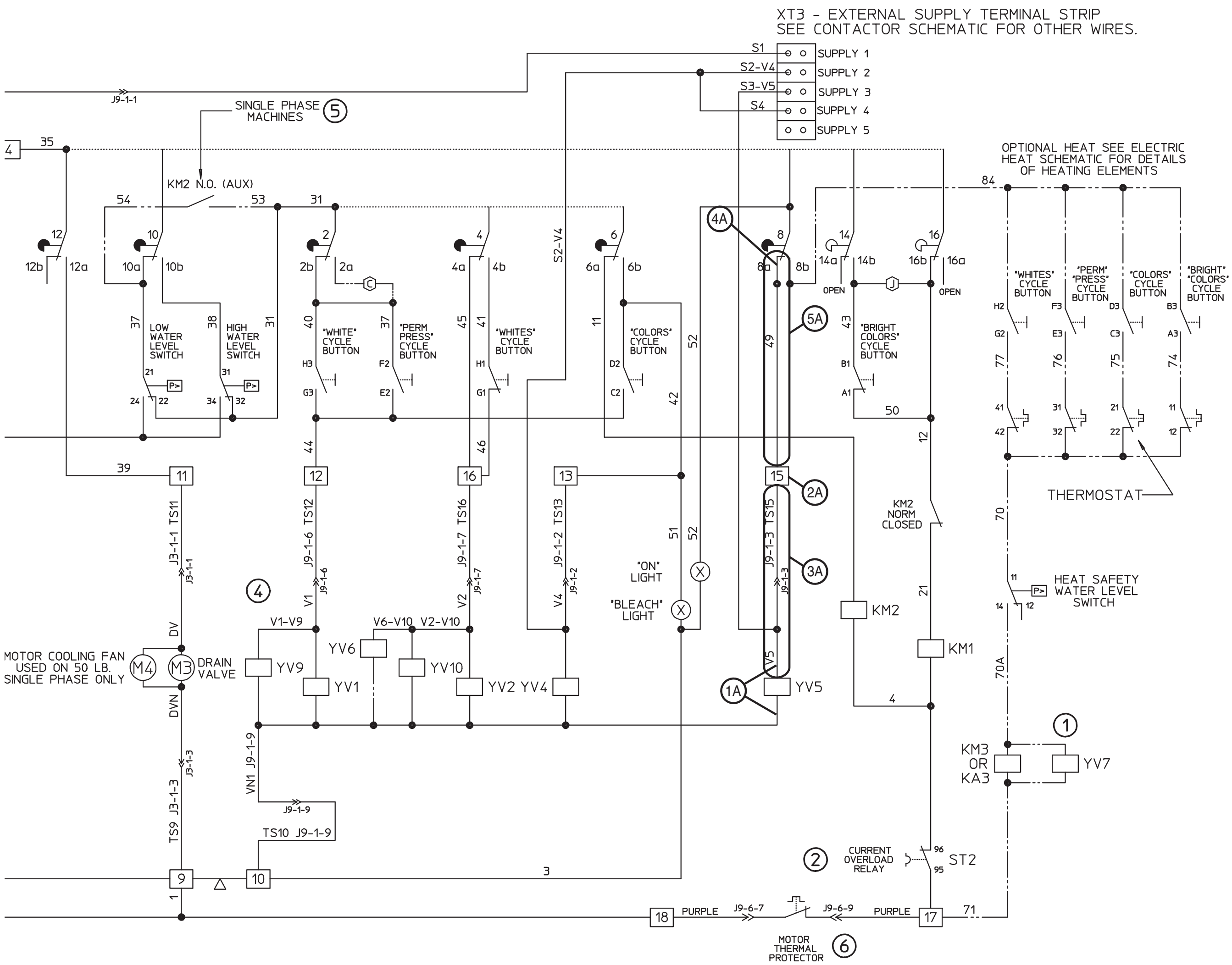
Please refer to the following 2 pages for wiring diagram information.

No Supply 3 Fill Analysis (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Supply 3 Fill Analysis (OPL) (Sheet 2 of 2)



AT, REPLACE HEAT
HEAT RELAY AND STEAM
AT SCHEMATIC FOR
ONS.

AY IS USED ON SINGLE
XCLUDING THE 20 LB.
EE CONTACTOR

OOR UNLOCK CONFIGURATION
R SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
, ARE NOT USED WITH
LVE.

TCH BYPASS WIRES MAY BE
LB. 3 PHASE MACHINES.
ONNECTED WHEN MACHINE
D WITH THESE WIRES.

AY NOT BE PRESENT ON

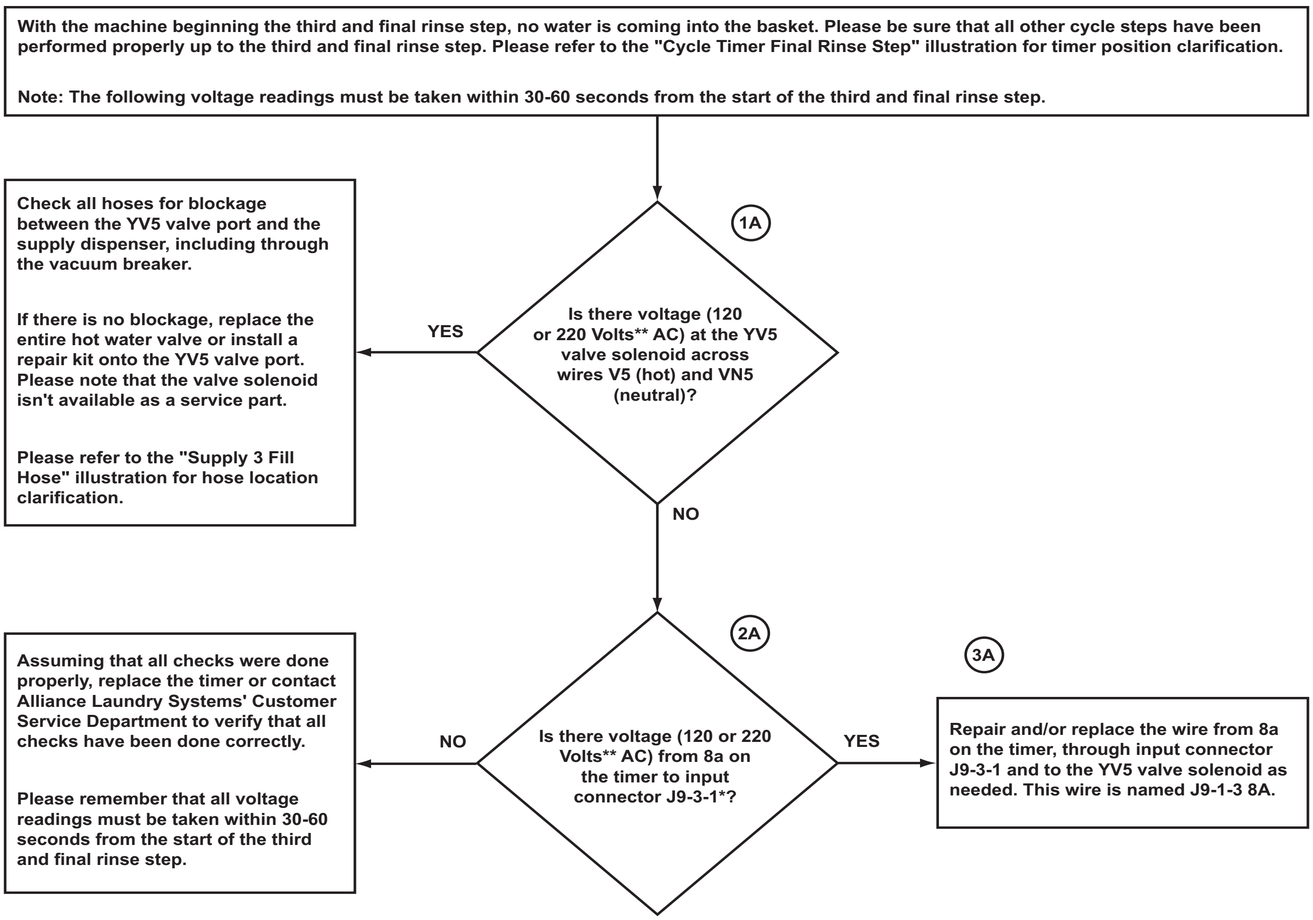
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

CHM266S
0635913(E)

8. No Supply 3 Fill Analysis (Coin)

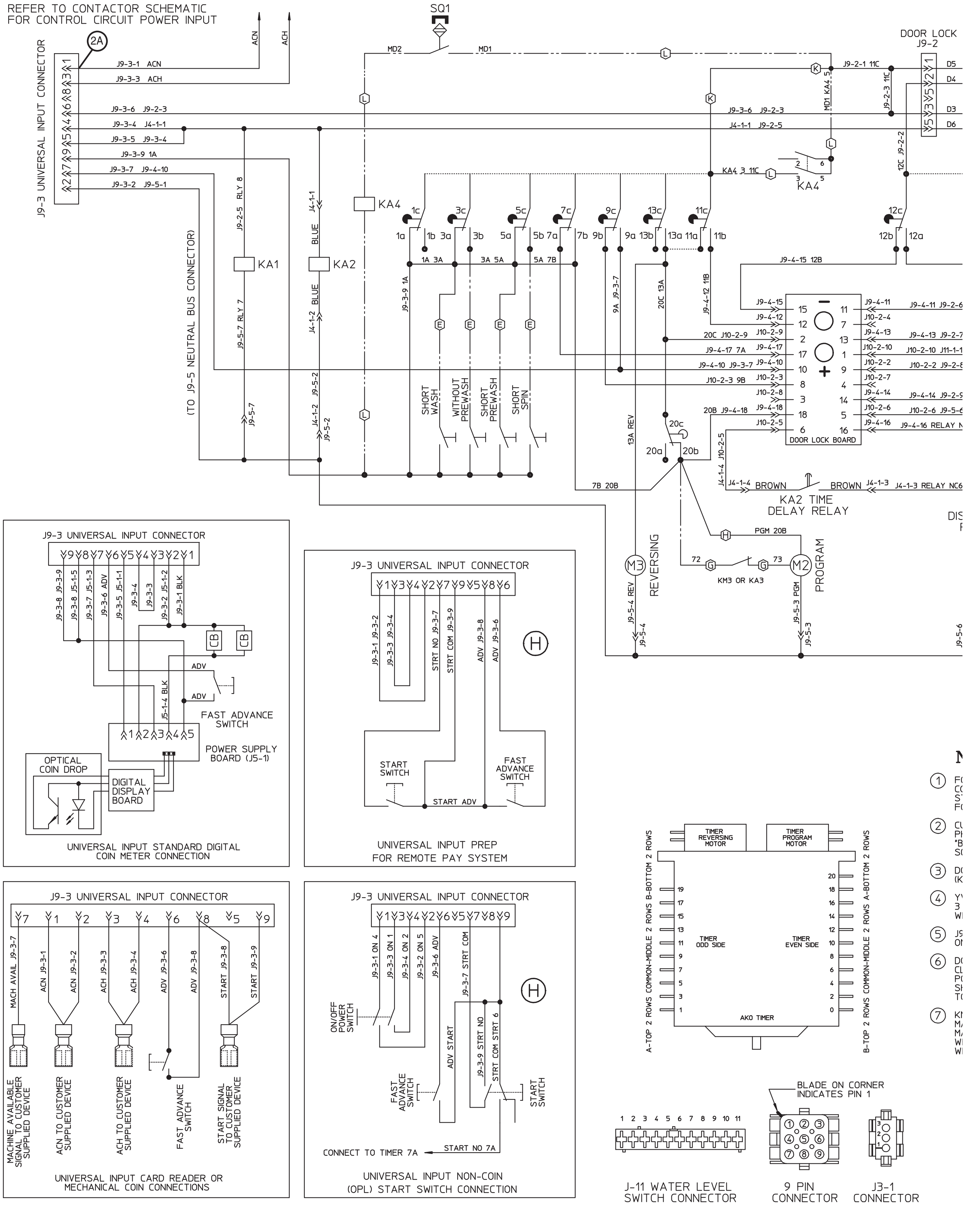


*Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.
**Note: All voltage readings are approximate.

CHM520S

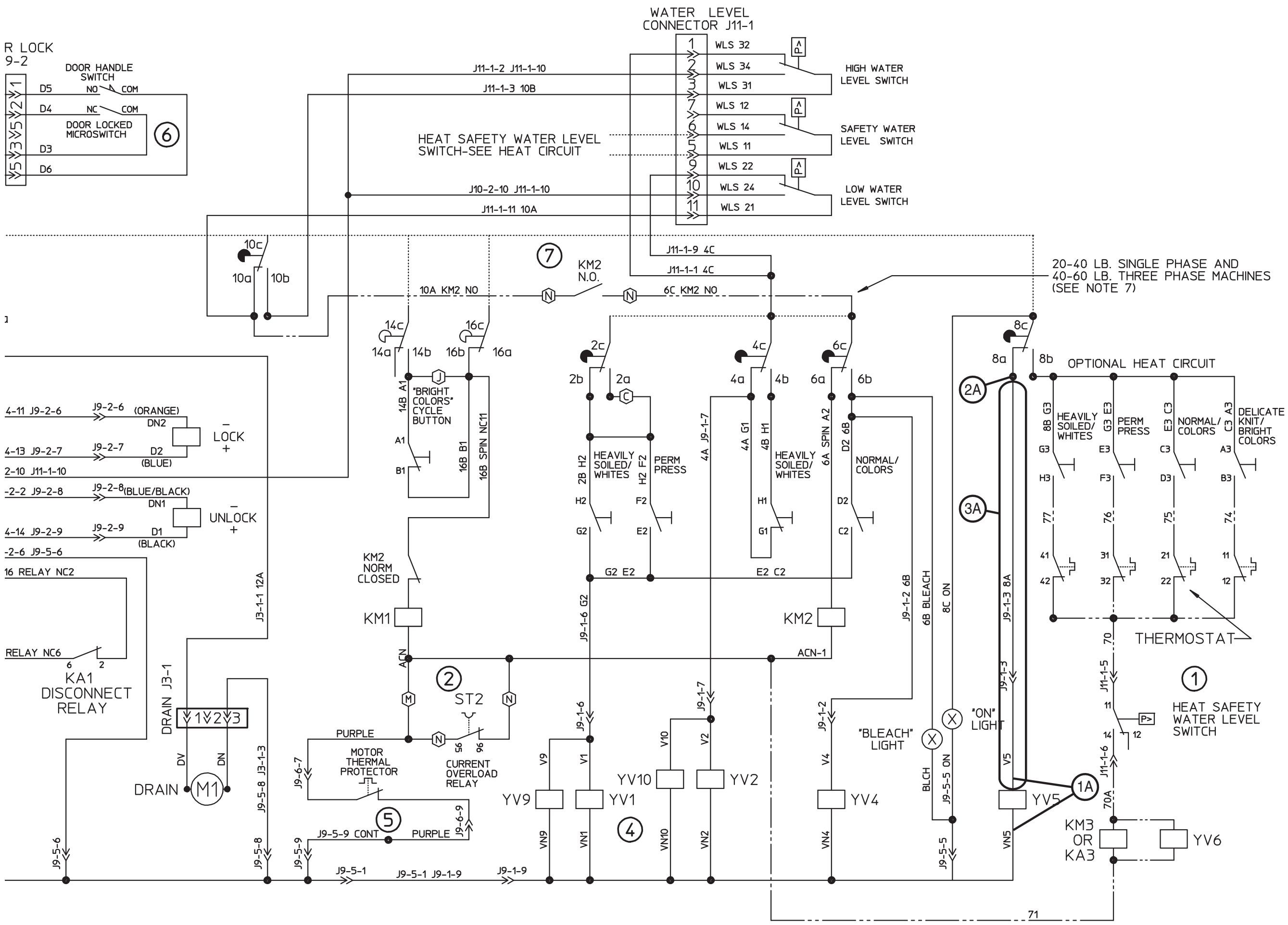
Please refer to the following 2 pages for wiring diagram information.

No Supply 3 Fill Analysis (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram suplied with your machine.

No Supply 3 Fill Analysis (Coin) (Sheet 2 of 2)



NOTES

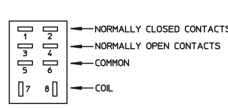
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- (C) CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- (E) NOT FACTORY INSTALLED
- (G) ADD CONNECTION FOR HEAT
- (H) REMOVE CONNECTION FOR HEAT
- (J) REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- (K) REMOVE CONNECTION FOR CE MARK OPTION
- (L) ADD CONNECTION FOR CE MARK OPTION
- (M) CONNECTION FOR 3 PHASE MACHINES
- (N) CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

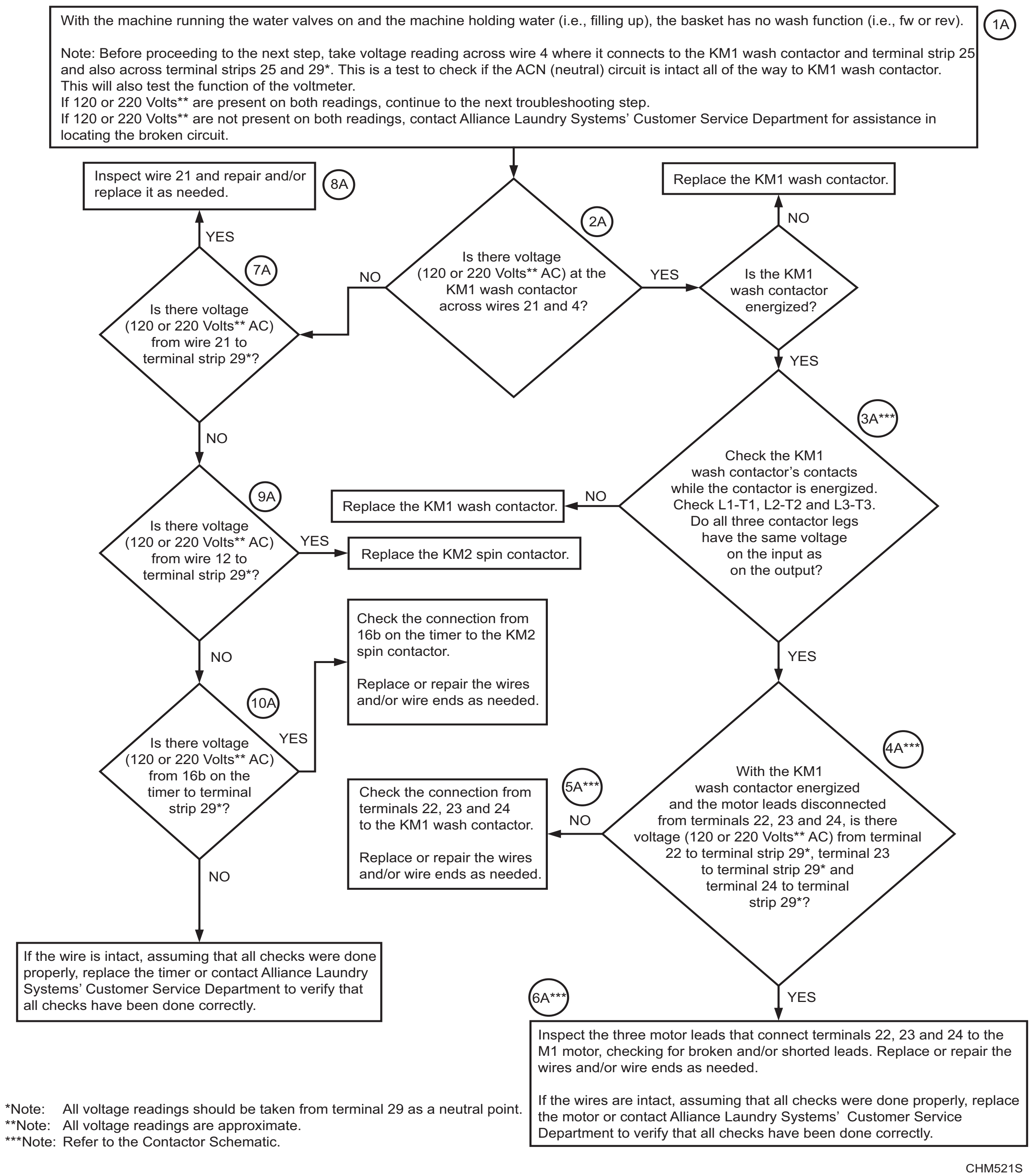
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

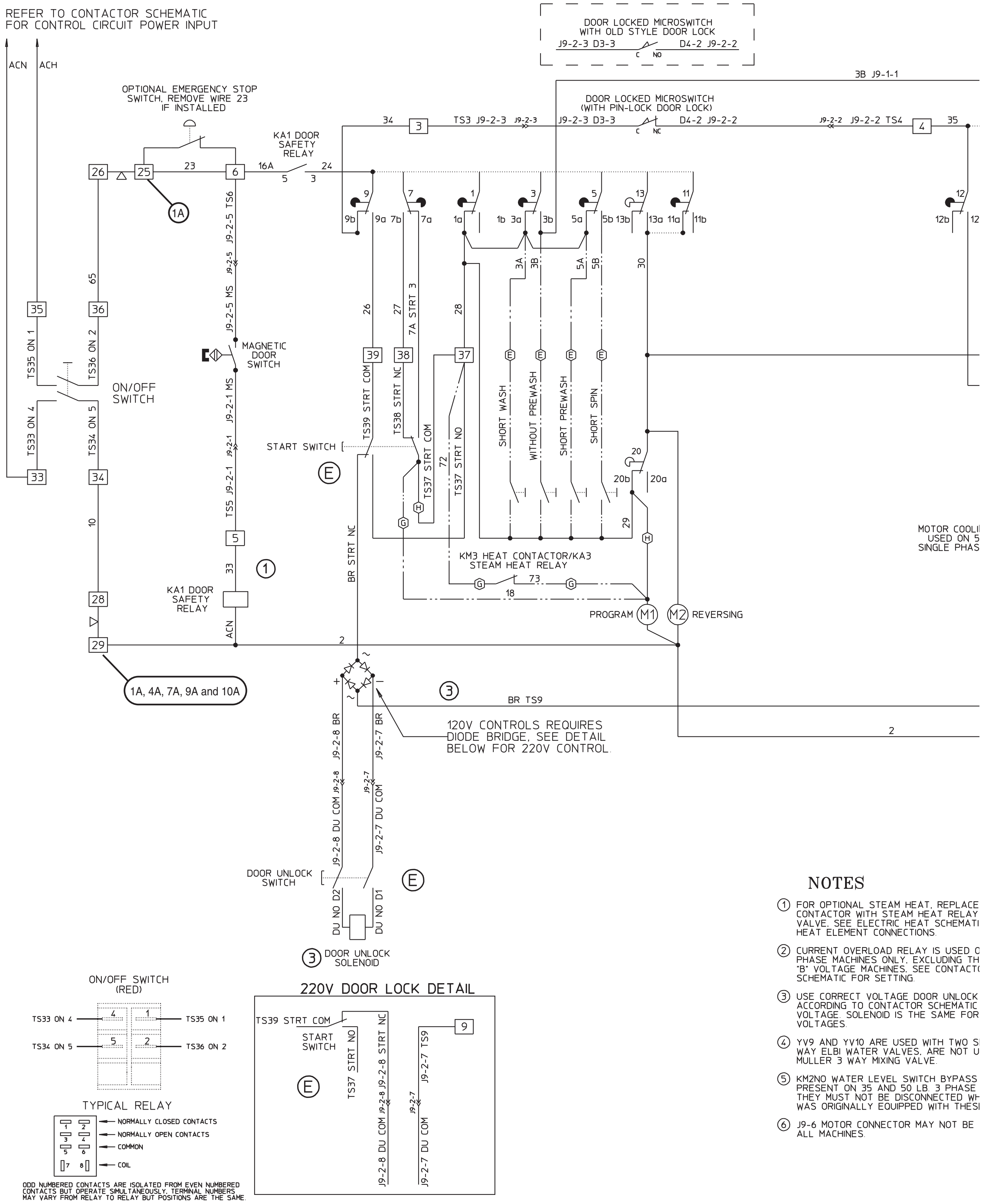
CHM269S
0636156(H)

9. No Motor Function (OPL; Fw and Rev)



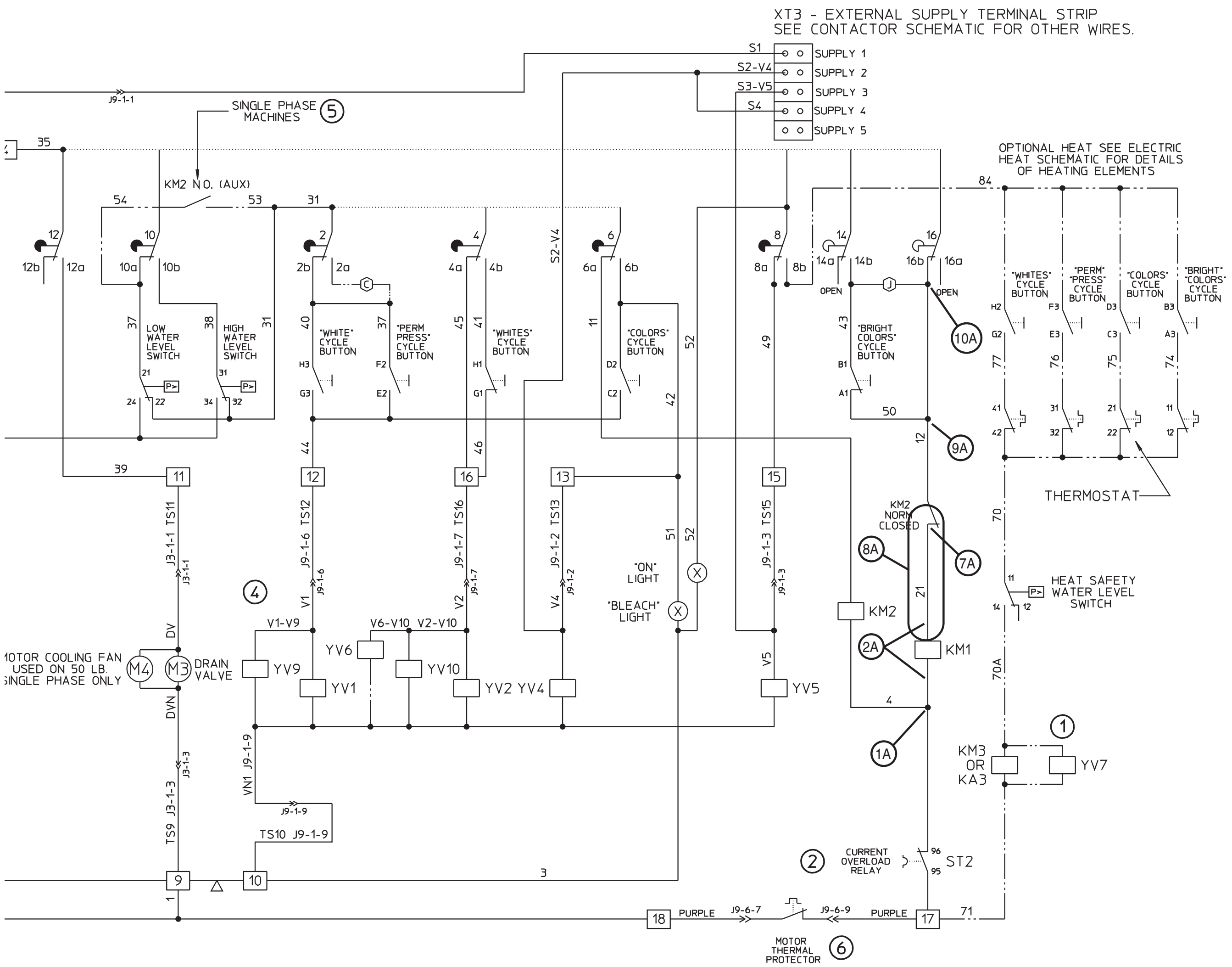
Please refer to the following 2 pages for wiring diagram information.

No Motor Function (OPL; Fw and Rev) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

No Motor Function (OPL; Fw and Rev) (Sheet 2 of 2)



ʟT. REPLACE HEAT
HEAT RELAY AND STEAM
ʟT SCHEMATIC FOR
ONS.

Y IS USED ON SINGLE
XCLUDING THE 20 LB.
E CONTACTOR

OOR UNLOCK CONFIGURATION
SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
ARE NOT USED WITH
VE.

CH BYPASS WIRES MAY BE
B. 3 PHASE MACHINES
NNECTED WHEN MACHINE
WITH THESE WIRES.

AY NOT BE PRESENT ON

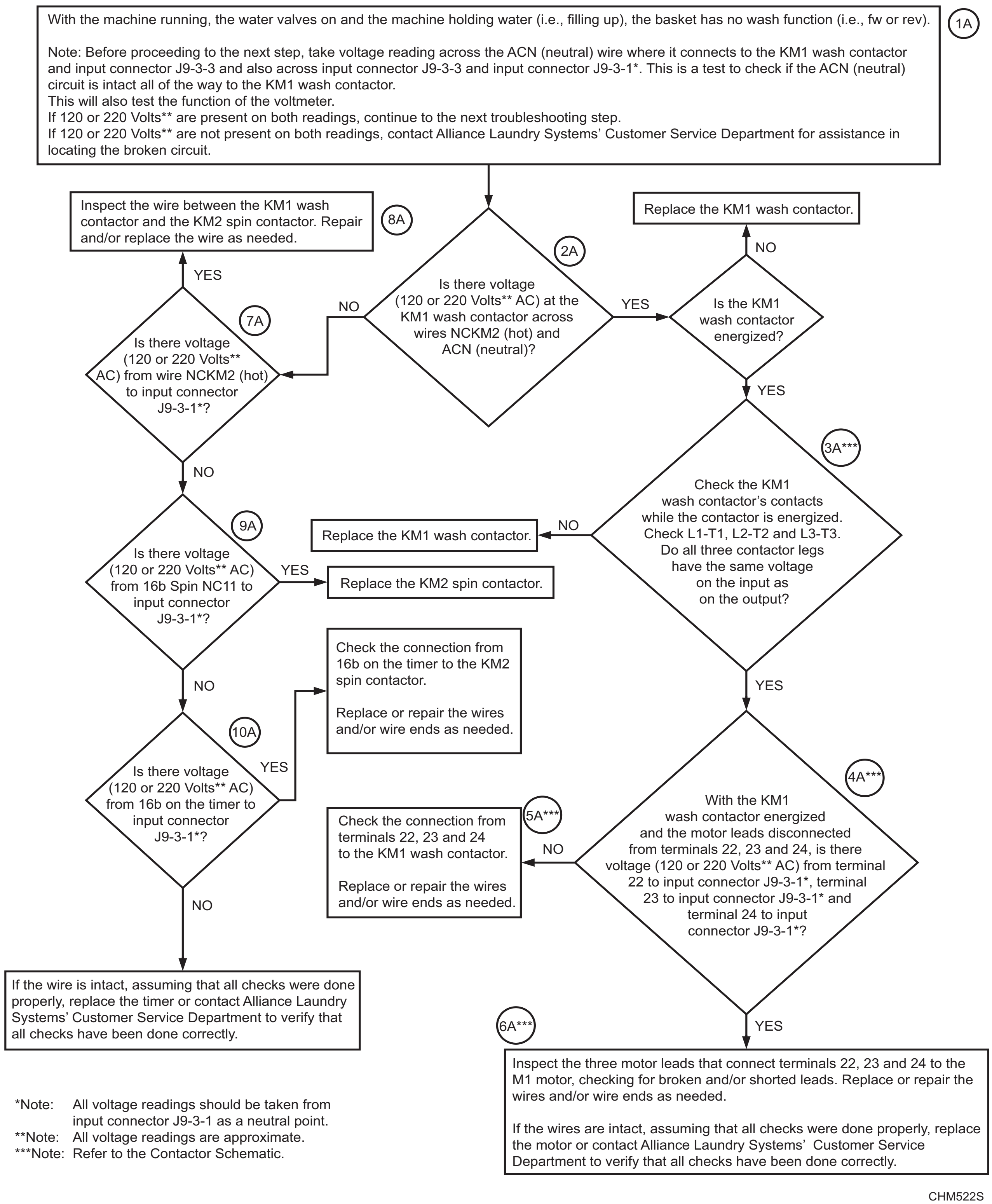
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

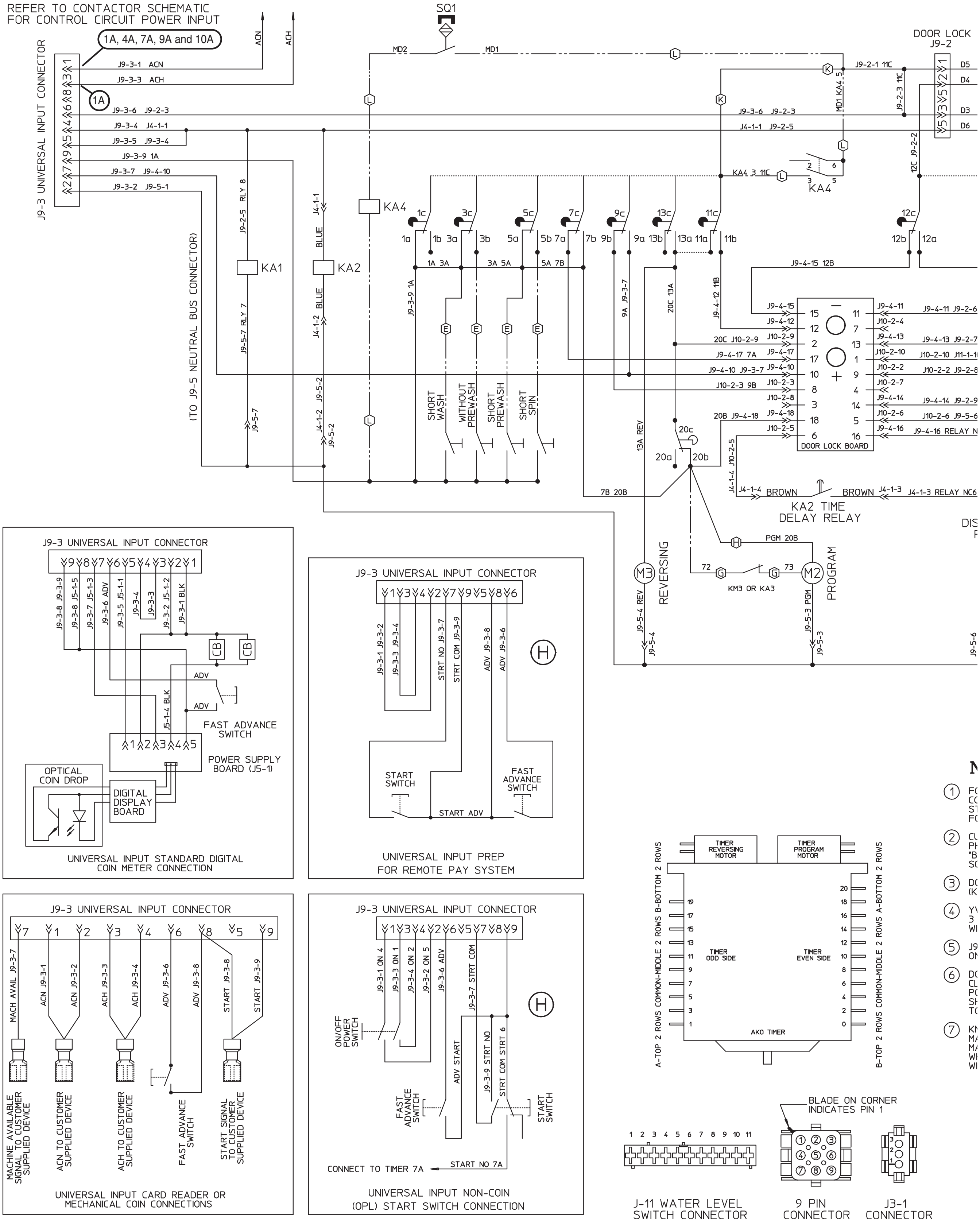
CHM250S
0635913(E)

10. No Motor Function (Coin; Fw and Rev)



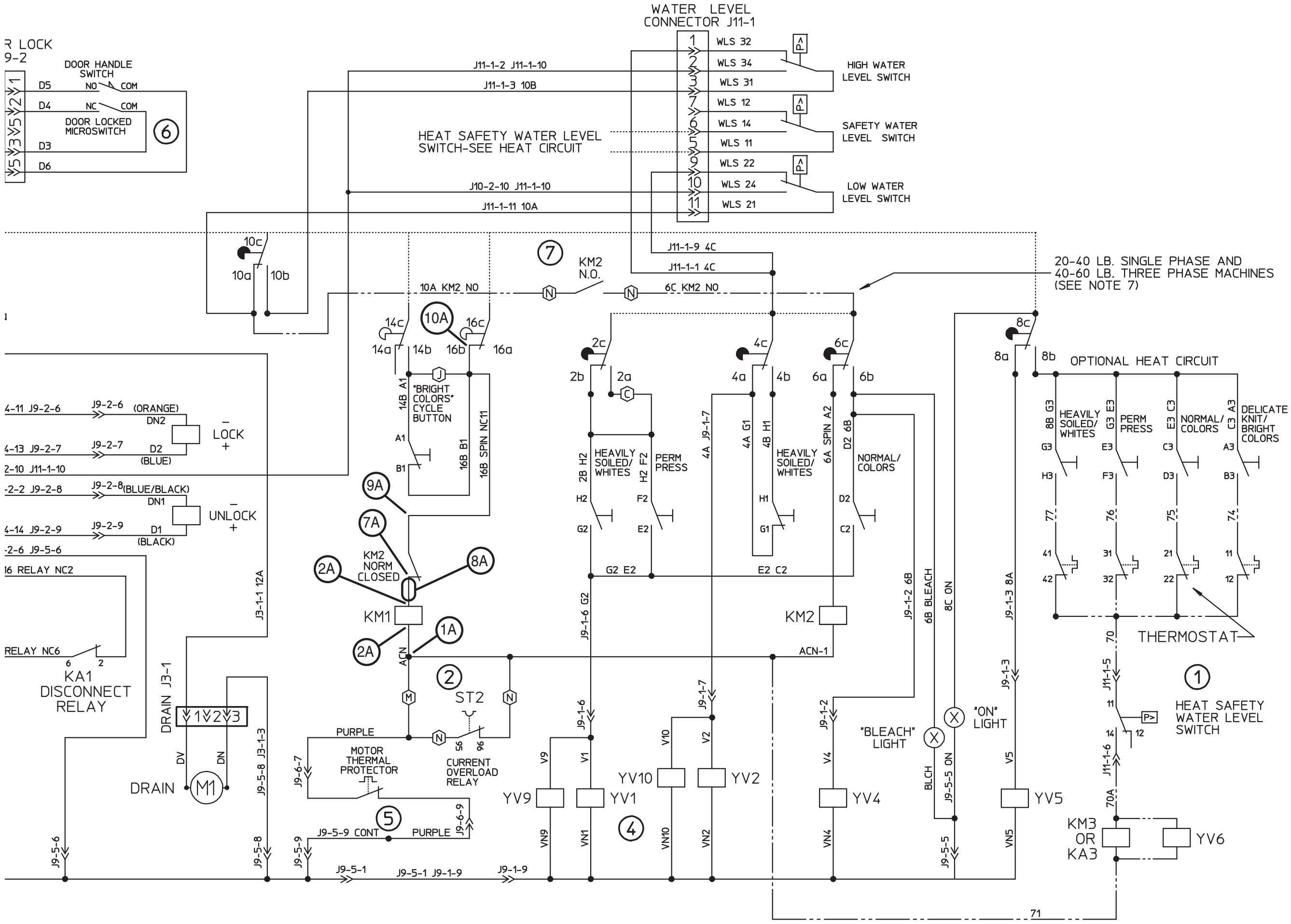
Please refer to the following 4 pages for wiring diagram information.

No Motor Function (Coin; Fw and Rev) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

No Motor Function (Coin; Fw and Rev) (Sheet 2 of 2)



NOTES

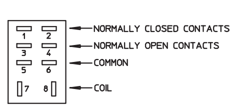
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- .... CONNECTIONS INTERNAL TO DEVICE
- —·—·— OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

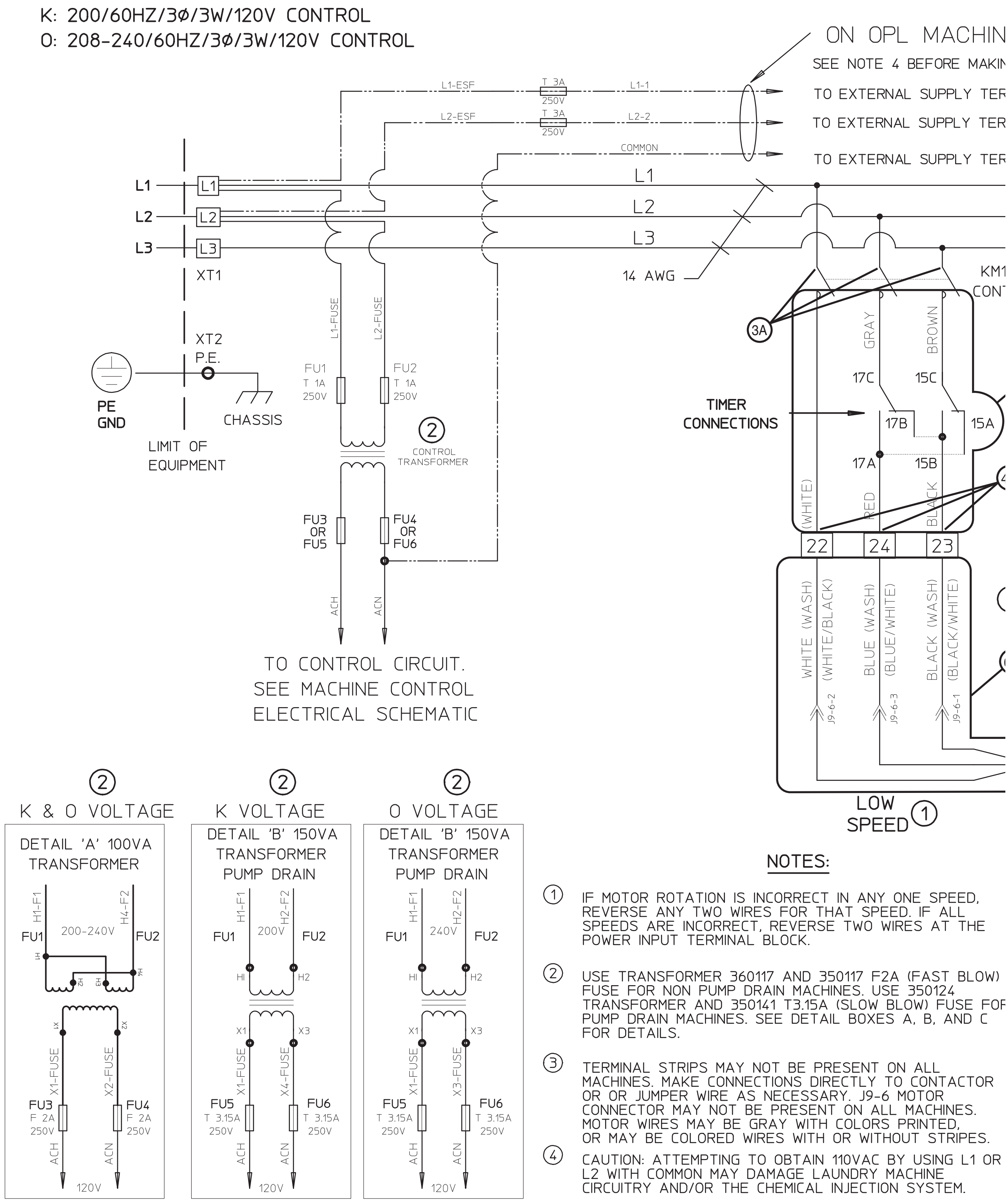
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM253S
0636156(H)

No Motor Function (Fw and Rev) Contactor Schematic (Sheet 1 of 2)



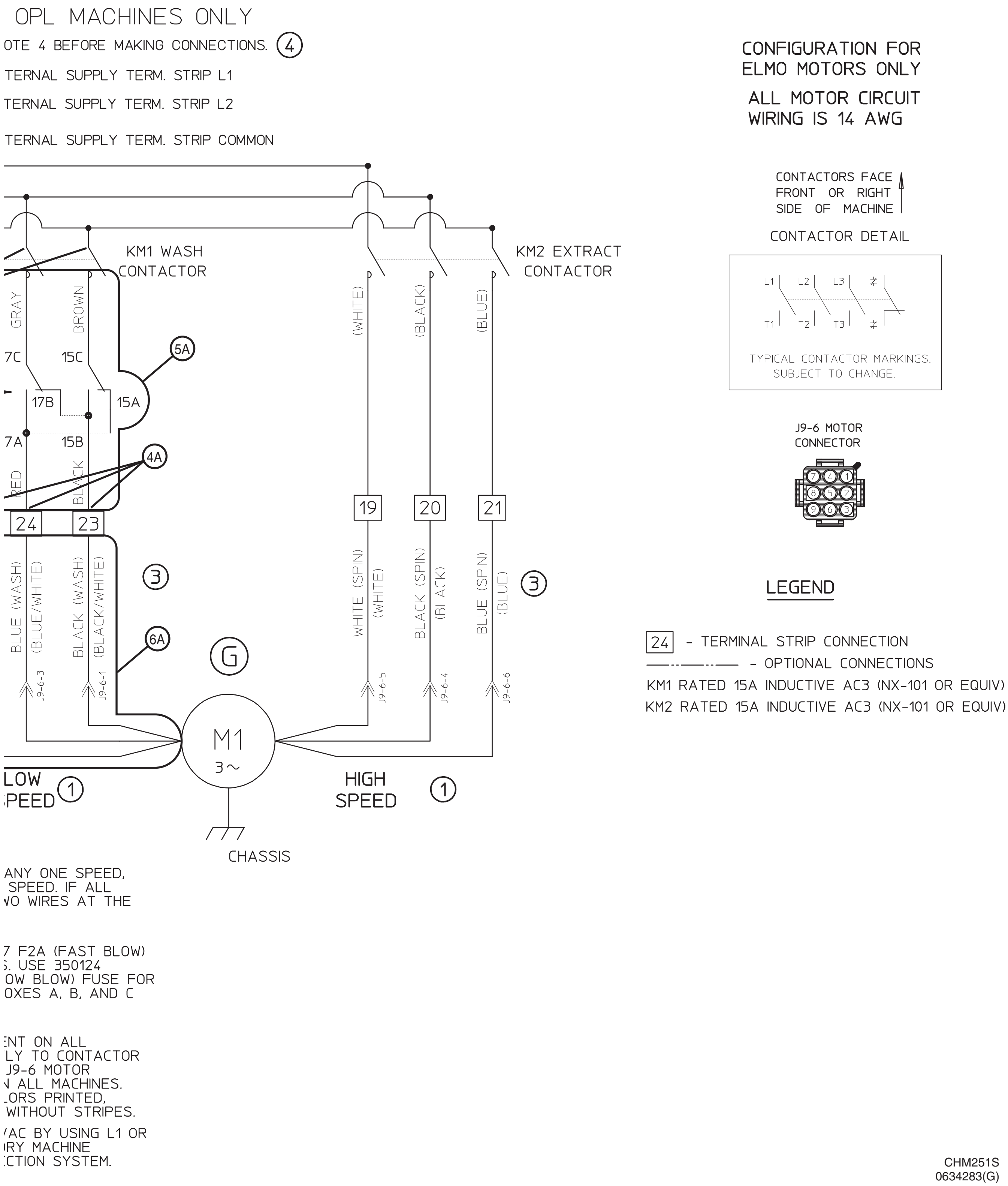
NOTES:

1. IF MOTOR ROTATION IS INCORRECT IN ANY ONE SPEED, REVERSE ANY TWO WIRES FOR THAT SPEED. IF ALL SPEEDS ARE INCORRECT, REVERSE TWO WIRES AT THE POWER INPUT TERMINAL BLOCK.
2. USE TRANSFORMER 360117 AND 350117 F2A (FAST BLOW) FUSE FOR NON PUMP DRAIN MACHINES. USE 350124 TRANSFORMER AND 350141 T3.15A (SLOW BLOW) FUSE FOR PUMP DRAIN MACHINES. SEE DETAIL BOXES A, B, AND C FOR DETAILS.
3. TERMINAL STRIPS MAY NOT BE PRESENT ON ALL MACHINES. MAKE CONNECTIONS DIRECTLY TO CONTACTOR OR OR JUMPER WIRE AS NECESSARY. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES. MOTOR WIRES MAY BE GRAY WITH COLORS PRINTED, OR MAY BE COLORED WIRES WITH OR WITHOUT STRIPES.
4. CAUTION: ATTEMPTING TO OBTAIN 110VAC BY USING L1 OR L2 WITH COMMON MAY DAMAGE LAUNDRY MACHINE CIRCUITRY AND/OR THE CHEMICAL INJECTION SYSTEM.

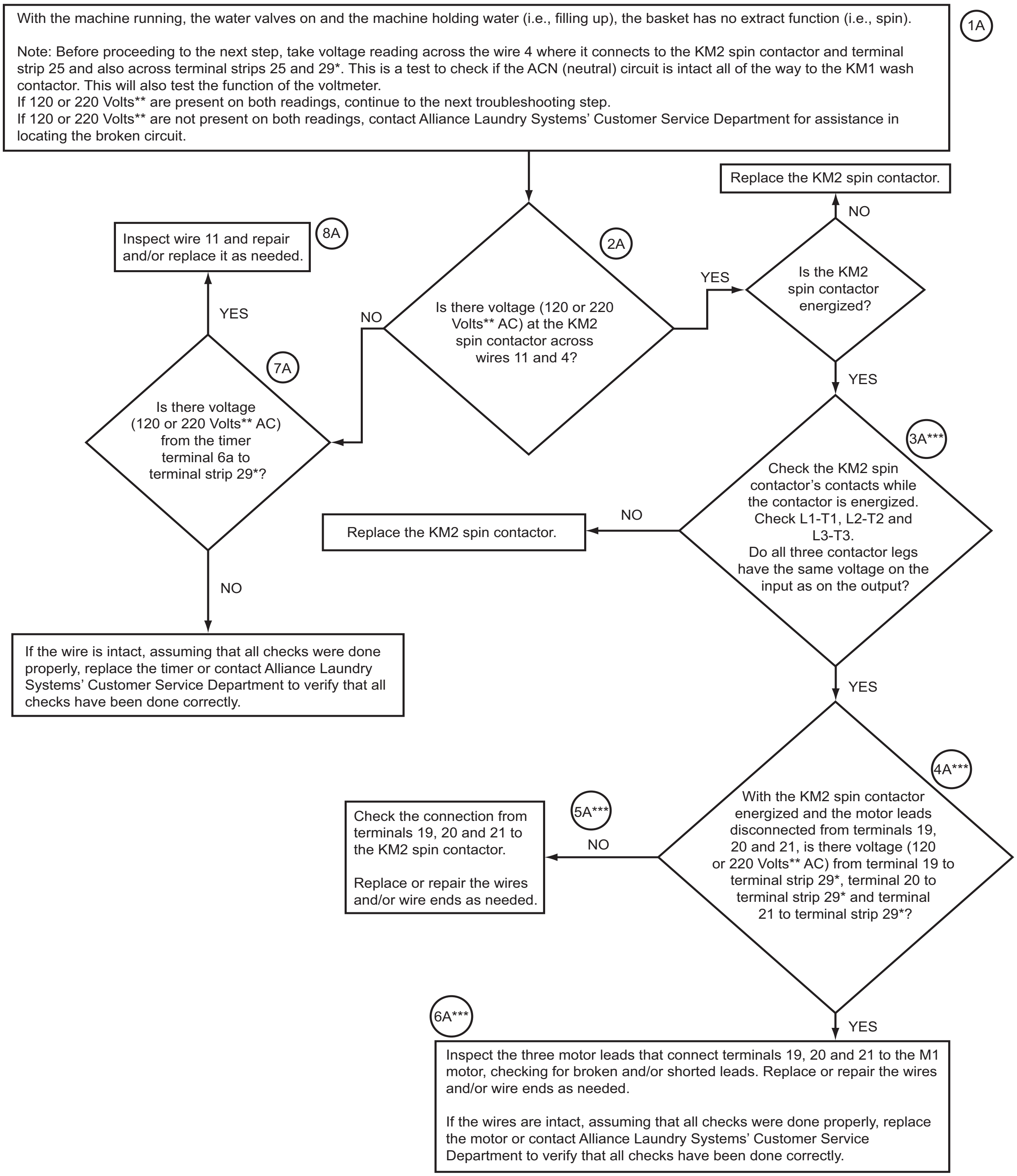
0634283 | G | 1 | drawings - RELEASED. Plotted by 'shannono' on 3-May-2004 12:06:57

NOTE: Refer to the wiring diagram supplied with your machine.

No Motor Function (Fw and Rev) Contactor Schematic (Sheet 2 of 2)



11. No Motor Function (OPL; Extract)

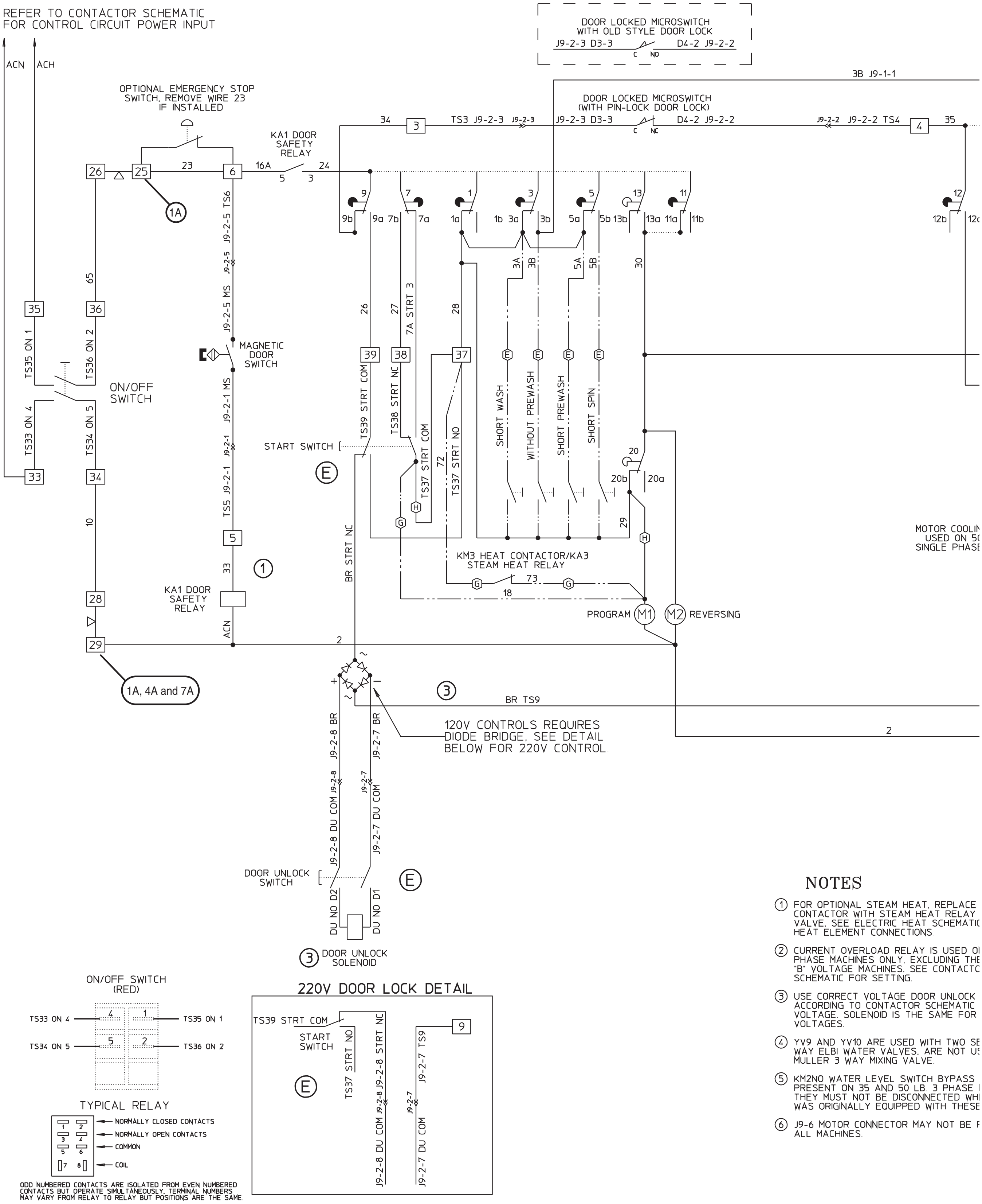


* Note: All voltage readings should be taken from terminal strip 29 as a neutral point.
** Note: All voltage readings are approximate.
*** Note: Refer to the Contactor Schematic.

CHM523S

Please refer to the following 2 pages for wiring diagram information.

No Motor Function (OPL; Extract) (Sheet 1 of 2)

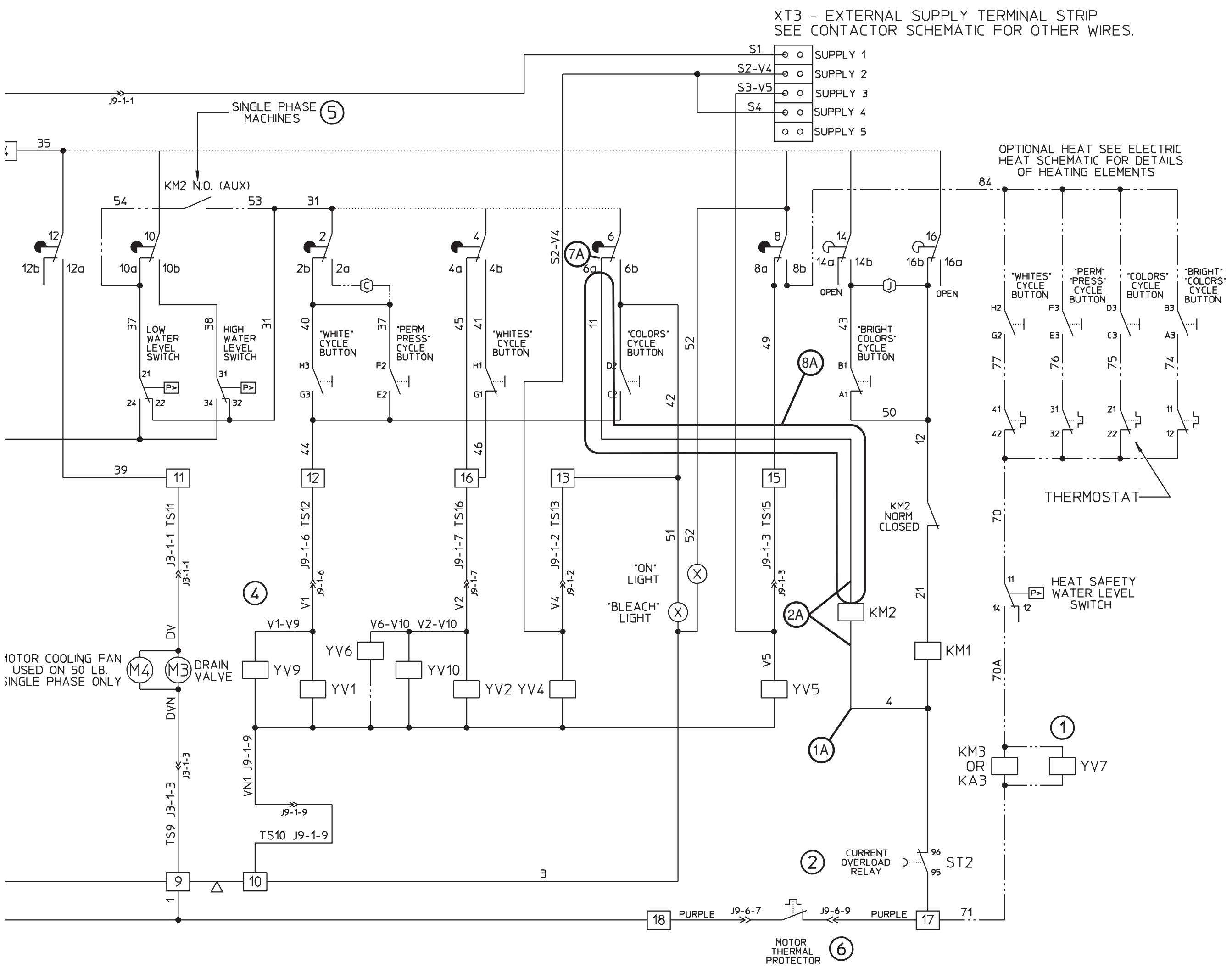


NOTES

1. FOR OPTIONAL STEAM HEAT, REPLACE CONTACTOR WITH STEAM HEAT RELAY VALVE. SEE ELECTRIC HEAT SCHEMATIC HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED O PHASE MACHINES ONLY, EXCLUDING THE "B" VOLTAGE MACHINES. SEE CONTACTO SCHEMATIC FOR SETTING.
3. USE CORRECT VOLTAGE DOOR UNLOCK ACCORDING TO CONTACTOR SCHEMATIC VOLTAGE. SOLENOID IS THE SAME FOR VOLTAGES.
4. YV9 AND YV10 ARE USED WITH TWO SE WAY ELBI WATER VALVES, ARE NOT US MULLER 3 WAY MIXING VALVE.
5. KM2NO WATER LEVEL SWITCH BYPASS PRESENT ON 35 AND 50 LB. 3 PHASE THEY MUST NOT BE DISCONNECTED WH WAS ORIGINALLY EQUIPPED WITH THESE
6. J9-6 MOTOR CONNECTOR MAY NOT BE ALL MACHINES.

NOTE: Refer to the wiring diagram supplied with your machine.

No Motor Function (OPL; Extract) (Sheet 2 of 2)



T, REPLACE HEAT
HEAT RELAY AND STEAM
T SCHEMATIC FOR
NS.

Y IS USED ON SINGLE
CLUDING THE 20 LB.
E CONTACTOR

OOR UNLOCK CONFIGURATION
SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
ARE NOT USED WITH
VE.

CH BYPASS WIRES MAY BE
B. 3 PHASE MACHINES.
NNECTED WHEN MACHINE
WITH THESE WIRES.

AY NOT BE PRESENT ON

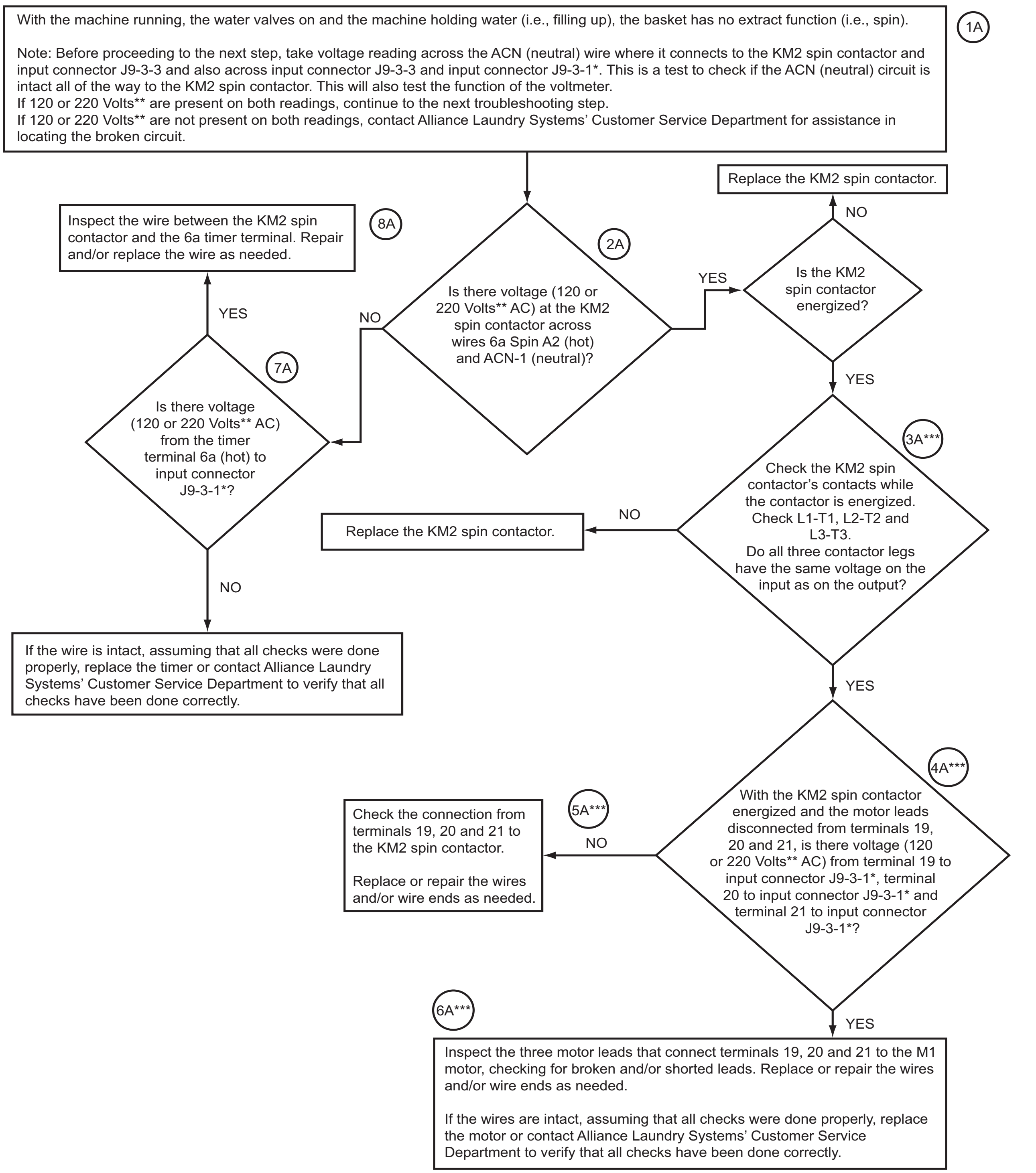
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

CHM258S
0635913(E)

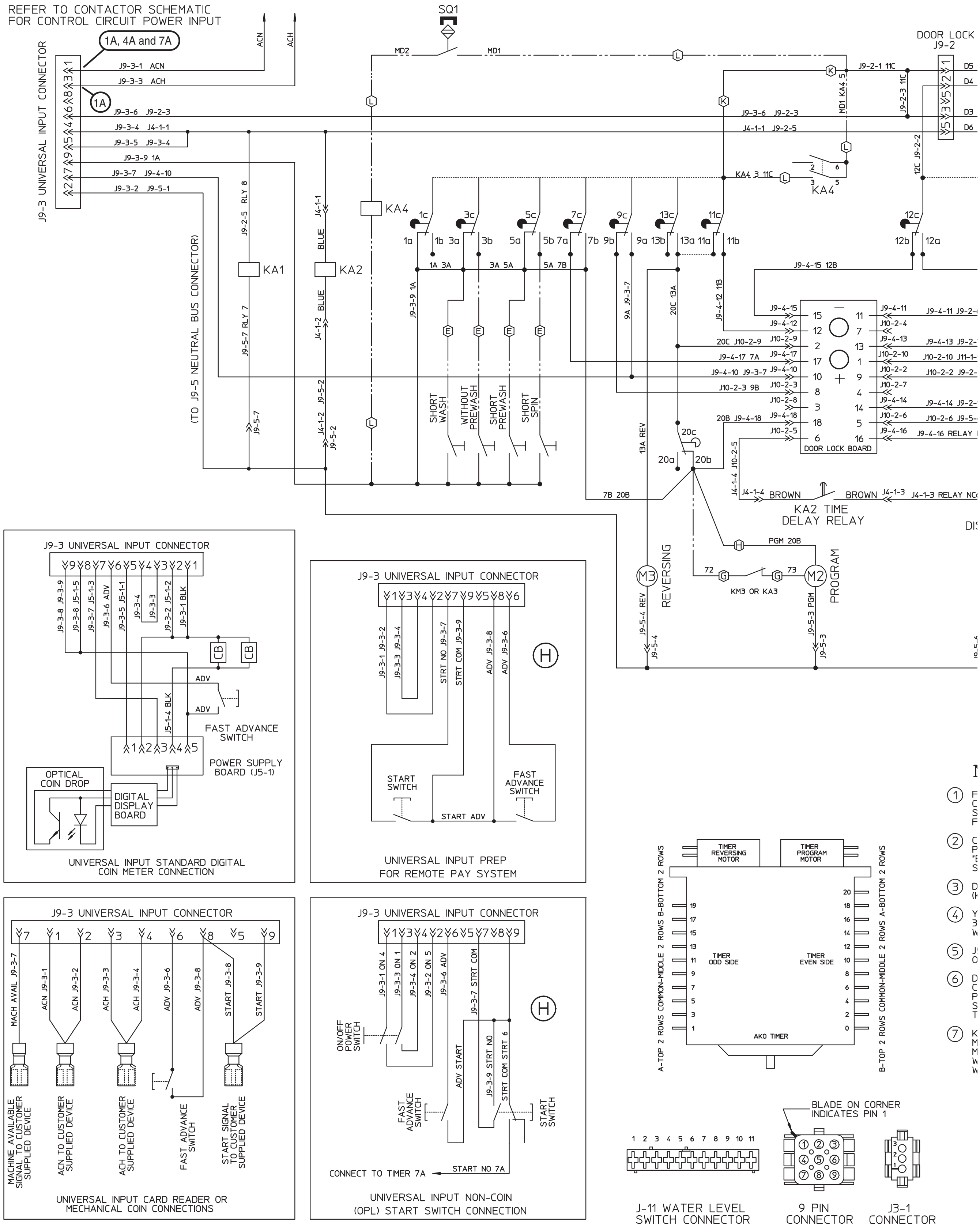
12. No Motor Function (Coin; Extract)



* Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.
** Note: All voltage readings are approximate.
*** Note: Refer to the Contactor Schematic.

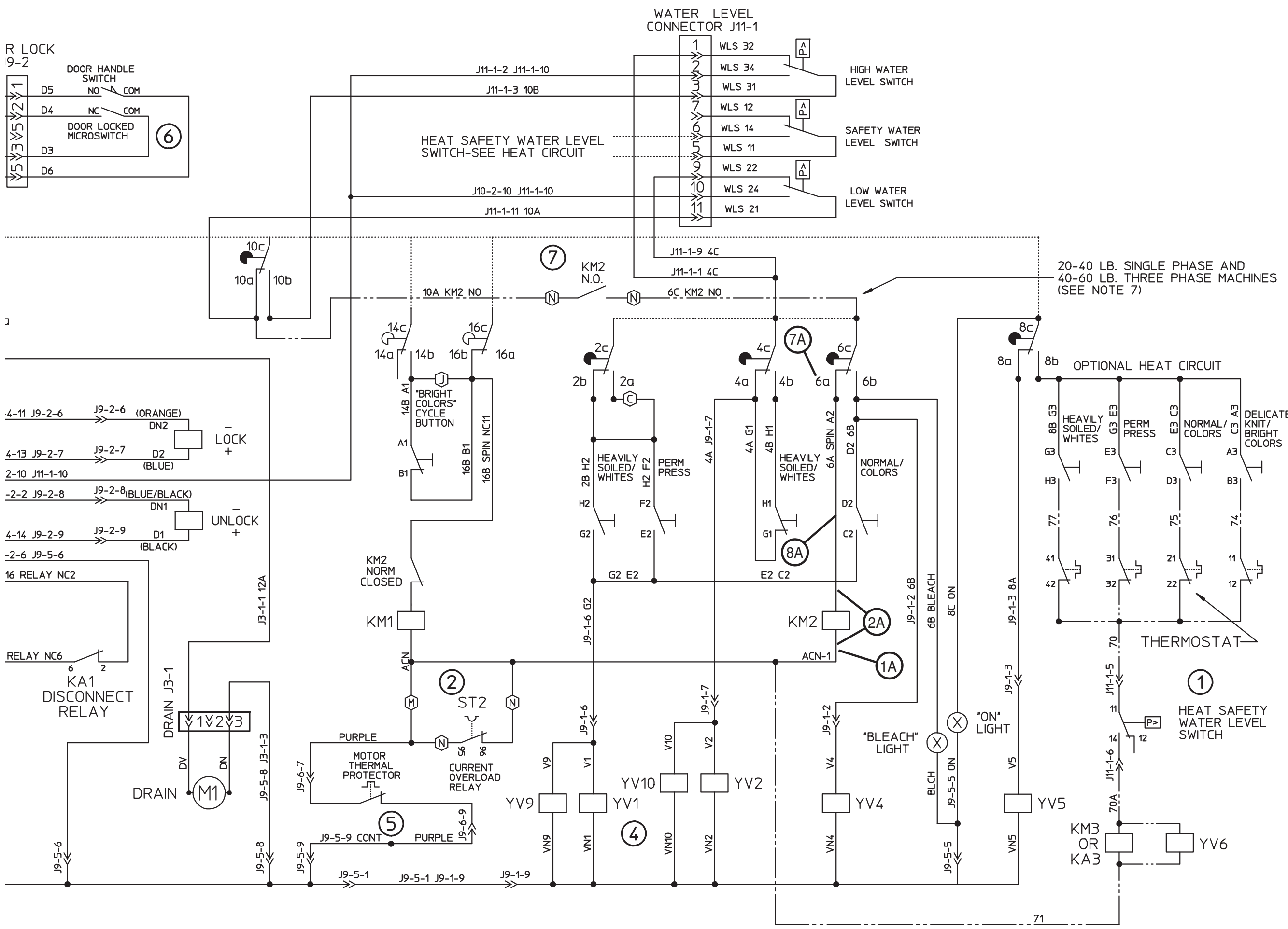
Please refer to the following 4 pages for wiring diagram information.

No Motor Function (Coin; Extract) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

No Motor Function (Coin; Extract) (Sheet 2 of 2)



NOTES

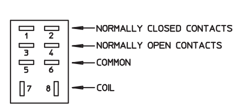
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- (C) CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- (E) NOT FACTORY INSTALLED
- (G) ADD CONNECTION FOR HEAT
- (H) REMOVE CONNECTION FOR HEAT
- (J) REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- (K) REMOVE CONNECTION FOR CE MARK OPTION
- (L) ADD CONNECTION FOR CE MARK OPTION
- (M) CONNECTION FOR 3 PHASE MACHINES
- (N) CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

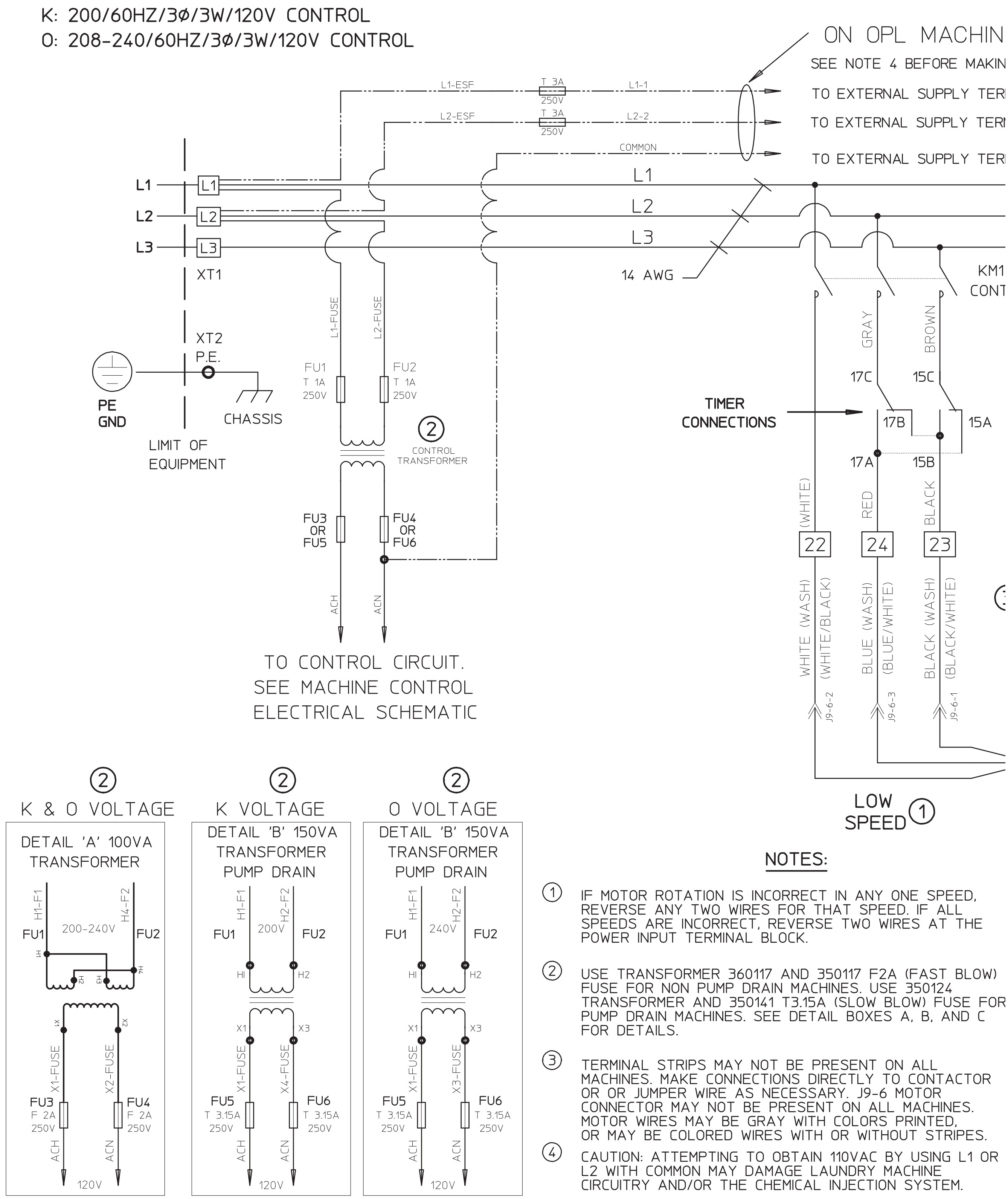
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM255S
0636156(H)

No Motor Function (Extract) Contactor Schematic (Sheet 1 of 2)



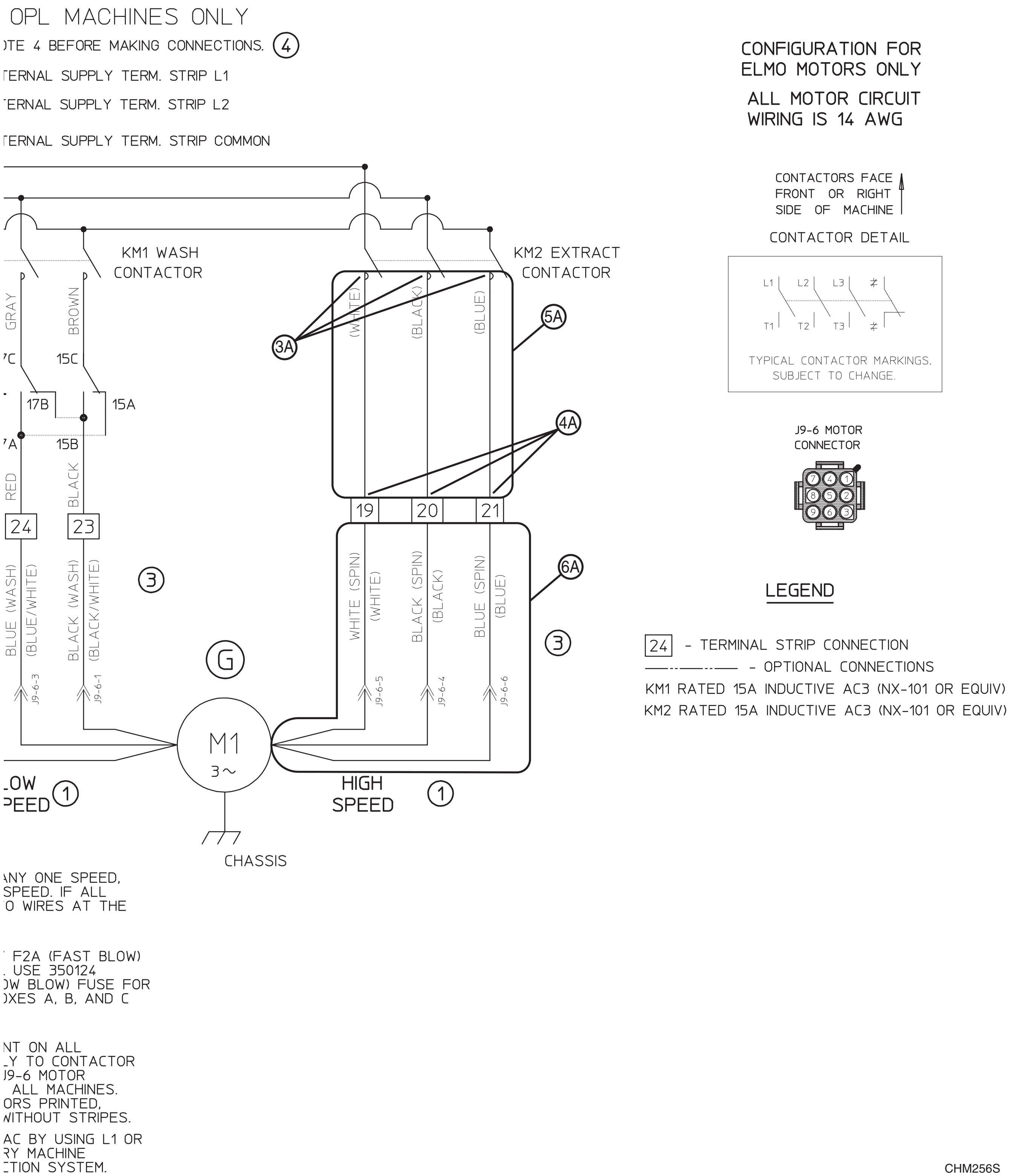
NOTES:

1. IF MOTOR ROTATION IS INCORRECT IN ANY ONE SPEED, REVERSE ANY TWO WIRES FOR THAT SPEED. IF ALL SPEEDS ARE INCORRECT, REVERSE TWO WIRES AT THE POWER INPUT TERMINAL BLOCK.
2. USE TRANSFORMER 360117 AND 350117 F2A (FAST BLOW) FUSE FOR NON PUMP DRAIN MACHINES. USE 350124 TRANSFORMER AND 350141 T3.15A (SLOW BLOW) FUSE FOR PUMP DRAIN MACHINES. SEE DETAIL BOXES A, B, AND C FOR DETAILS.
3. TERMINAL STRIPS MAY NOT BE PRESENT ON ALL MACHINES. MAKE CONNECTIONS DIRECTLY TO CONTACTOR OR OR JUMPER WIRE AS NECESSARY. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES. MOTOR WIRES MAY BE GRAY WITH COLORS PRINTED, OR MAY BE COLORED WIRES WITH OR WITHOUT STRIPES.
4. CAUTION: ATTEMPTING TO OBTAIN 110VAC BY USING L1 OR L2 WITH COMMON MAY DAMAGE LAUNDRY MACHINE CIRCUITRY AND/OR THE CHEMICAL INJECTION SYSTEM.

0634283 | G | 1 | drawings - RELEASED. Plotted by 'shannono' on 3-May-2004 12:06:57

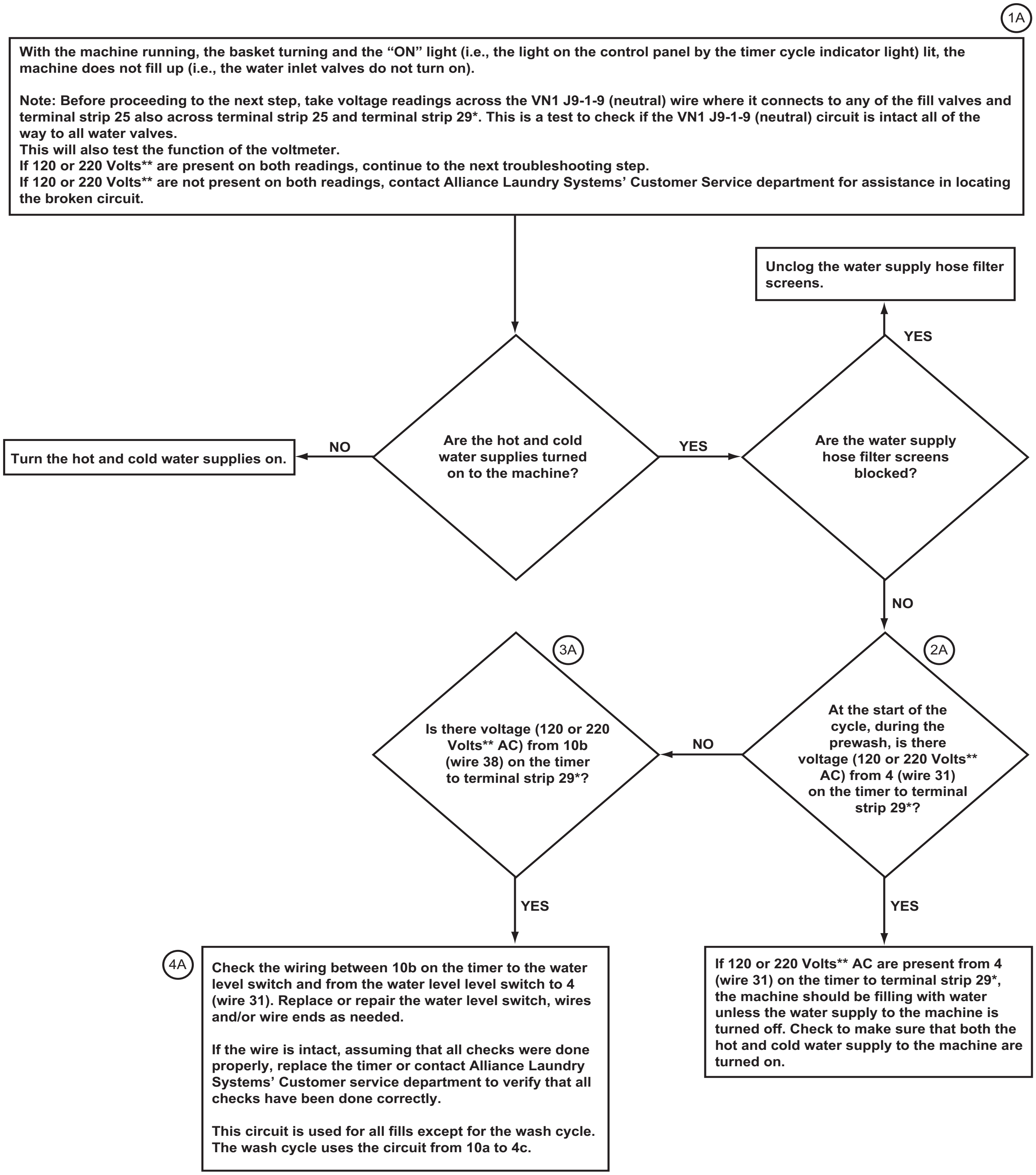
NOTE: Refer to the wiring diagram supplied with your machine.

No Motor Function (Extract) Contactor Schematic (Sheet 2 of 2)



CHM256S
0634283(G)

13. No Fill at Any Time During the Cycle (OPL)

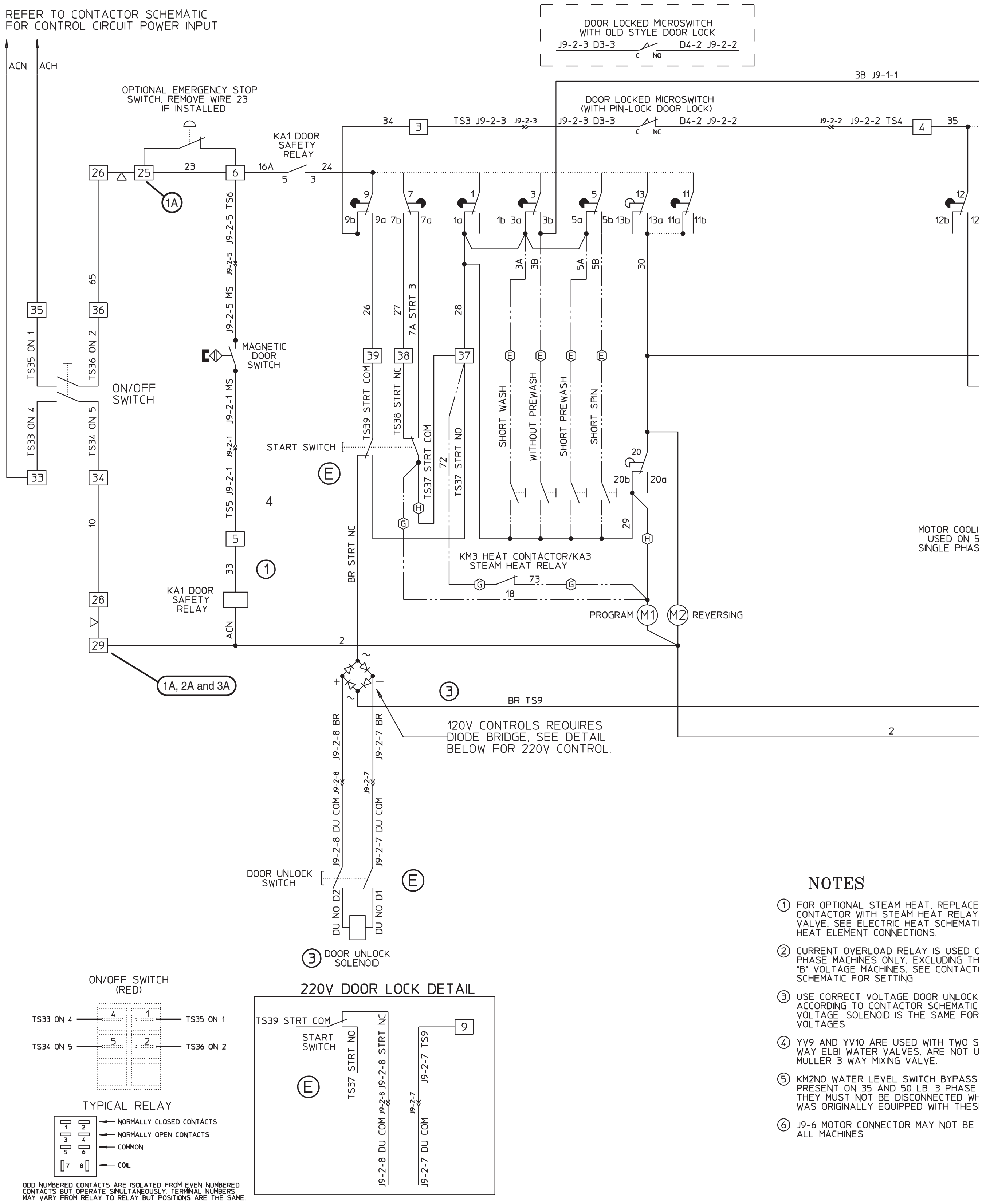


*Note: All voltage readings should be taken from terminal strip 29 as a neutral point.
**Note: All voltage readings are approximate.

CHM525S

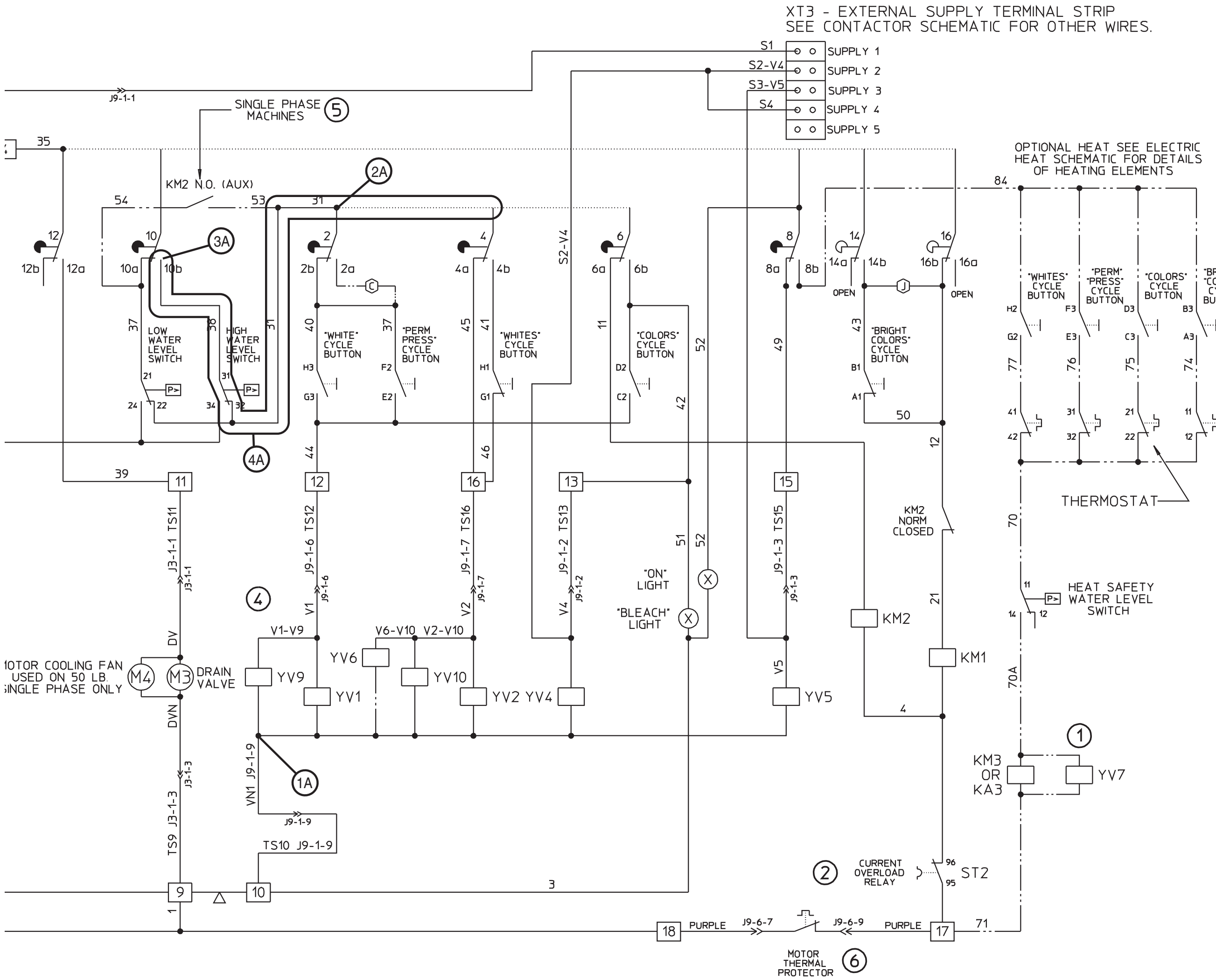
Please refer to the following 2 pages for wiring diagram information.

No Fill at Any Time During the Cycle (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

No Fill at Any Time During the Cycle (OPL) (Sheet 2 of 2)



.T. REPLACE HEAT
IEAT RELAY AND STEAM
.T SCHEMATIC FOR
NS.

Y IS USED ON SINGLE
XCLUDING THE 20 LB.
E CONTACTOR

OOR UNLOCK CONFIGURATION
SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
ARE NOT USED WITH
VE.

CH BYPASS WIRES MAY BE
B. 3 PHASE MACHINES.
NNECTED WHEN MACHINE
WITH THESE WIRES.

AY NOT BE PRESENT ON

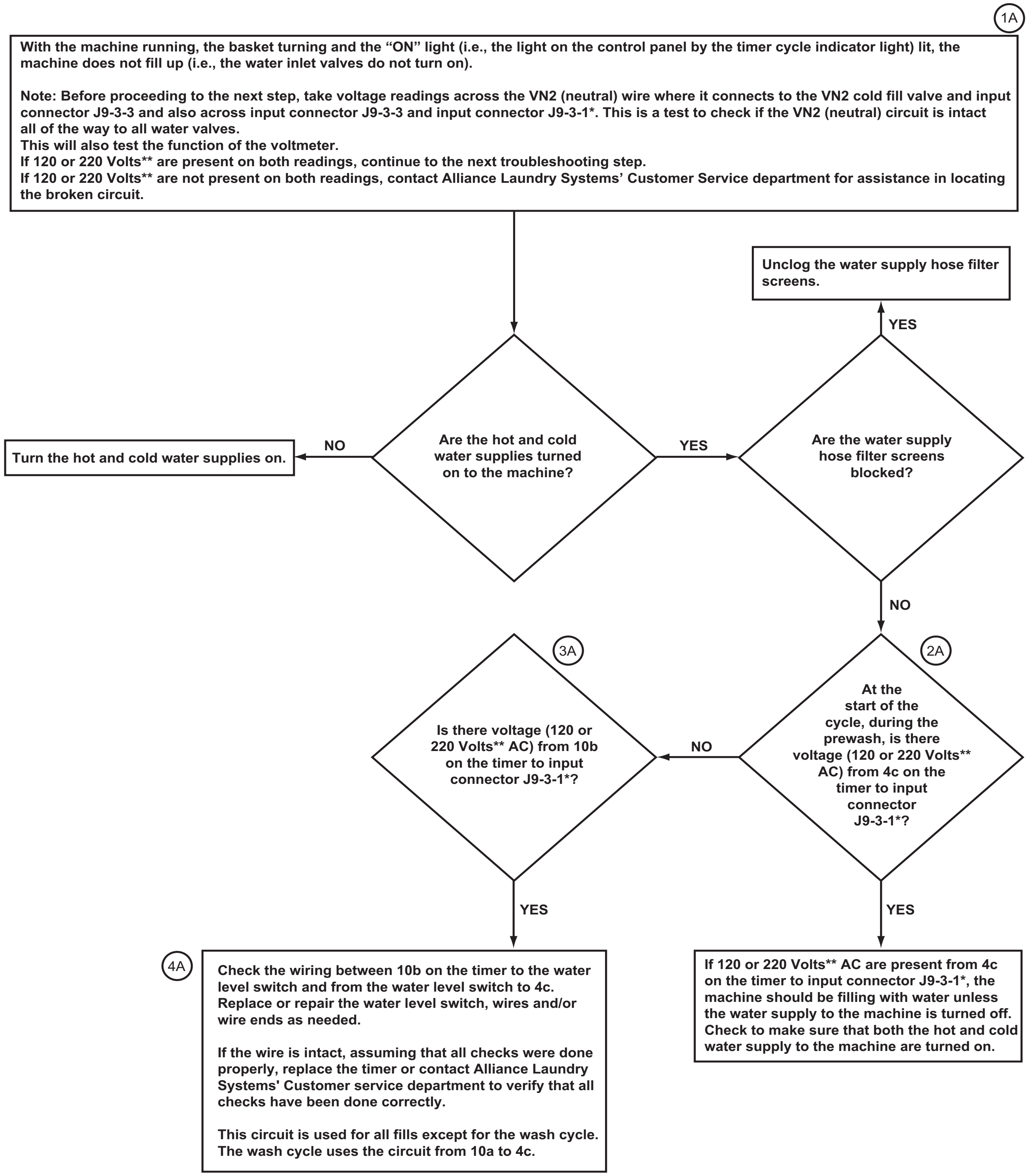
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

CHM262S
0635913(E)

14. No Fill at Any Time During the Cycle (Coin)

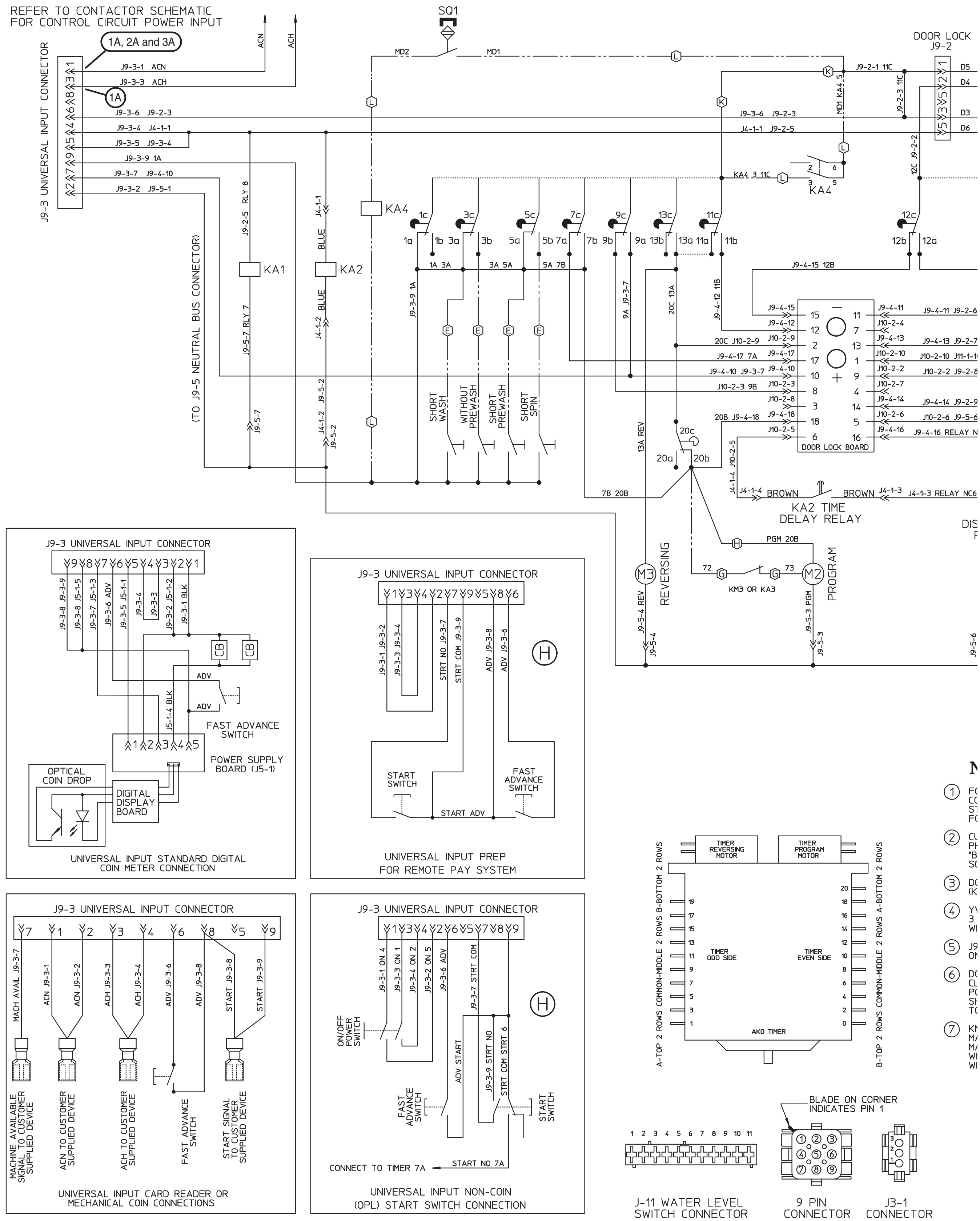


*Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.
**Note: All voltage readings are approximate.

CHM526S

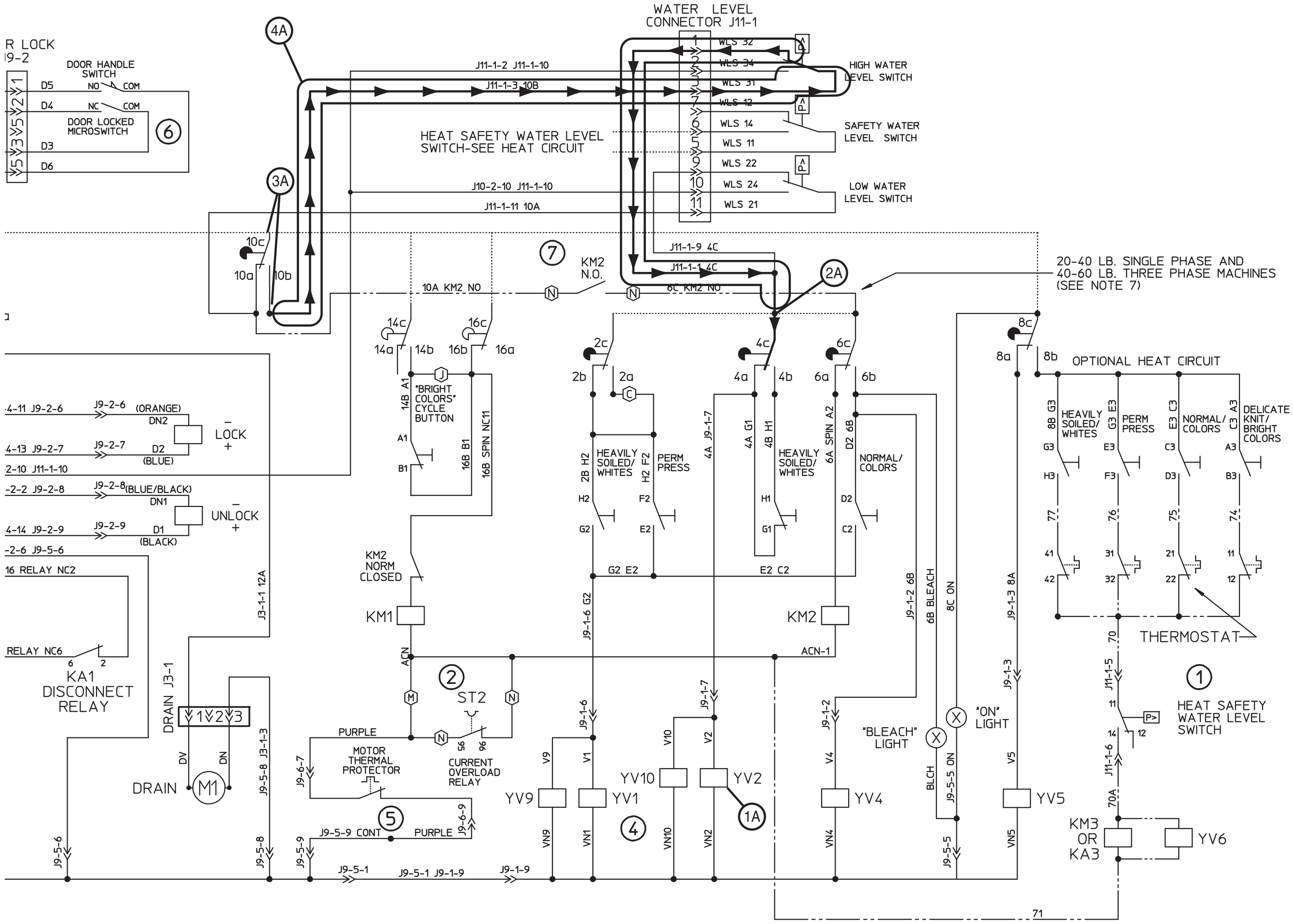
Please refer to the following 2 pages for wiring diagram information.

No Fill at Any Time During the Cycle (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

No Fill at Any Time During the Cycle (Coin) (Sheet 2 of 2)



NOTES

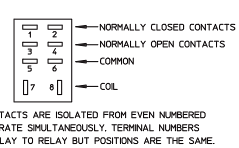
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

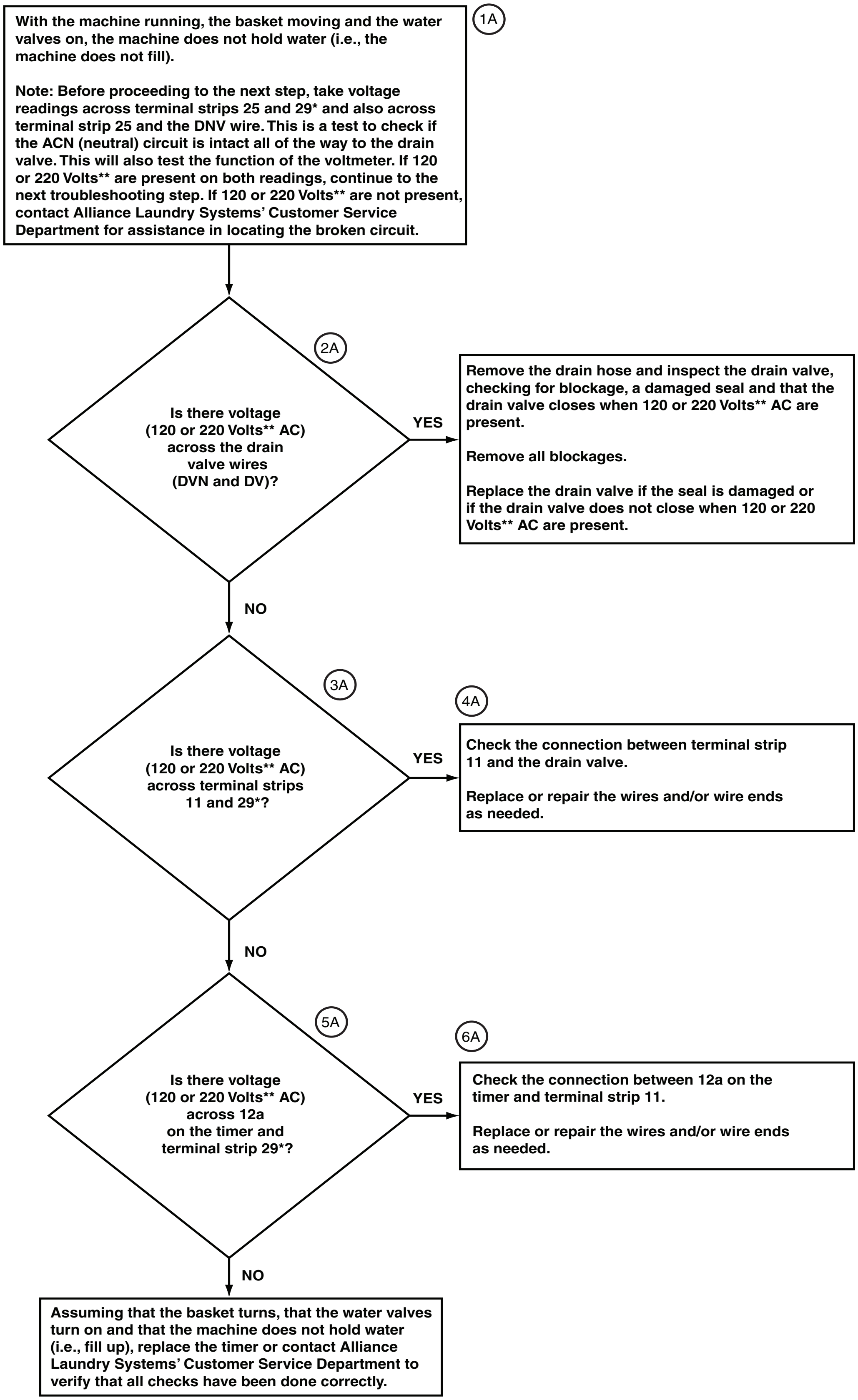
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM260S
0636156(H)

15. Drain Valve Malfunction (OPL)

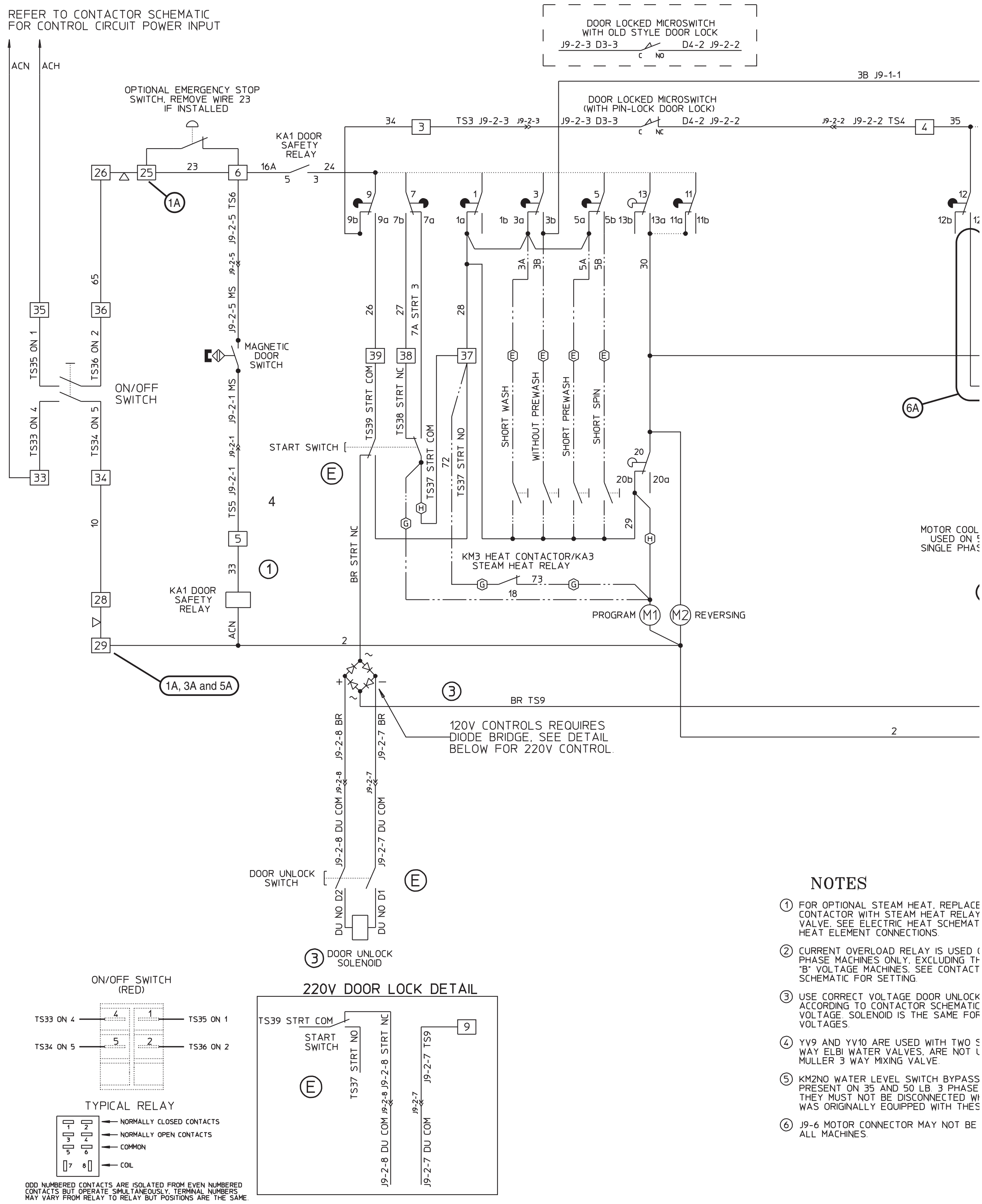


***Note: All voltage readings should be taken from terminal 29 as a neutral point.**
****Note: All voltage readings are approximate.**

CHM527S

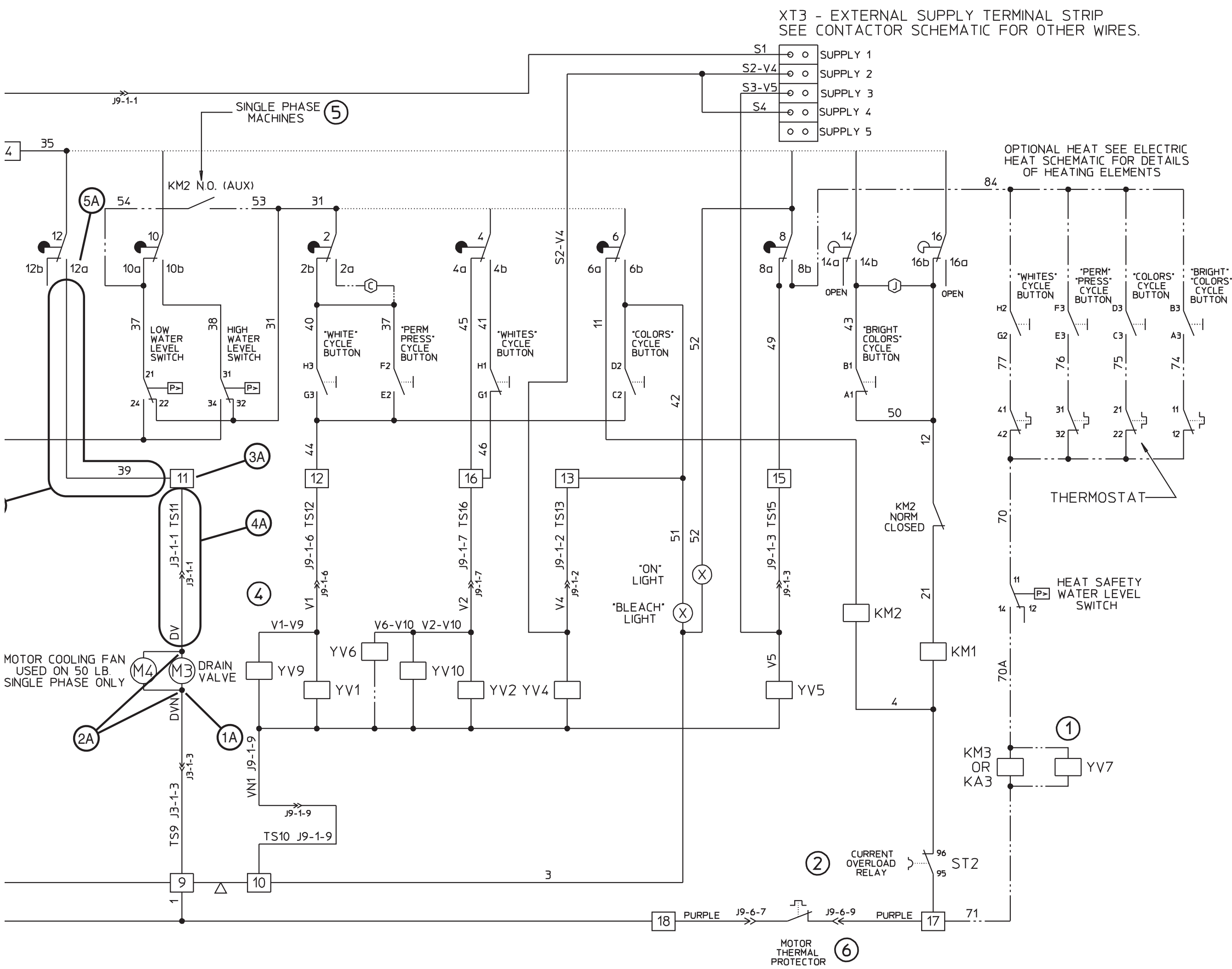
Please refer to the following 2 pages for wiring diagram information.

Drain Valve Malfunction (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Drain Valve Malfunction (OPL) (Sheet 2 of 2)



AT, REPLACE HEAT
HEAT RELAY AND STEAM
AT SCHEMATIC FOR
ONS.

AY IS USED ON SINGLE
XCLUDING THE 20 LB.
EE CONTACTOR

OOR UNLOCK CONFIGURATION
R SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
, ARE NOT USED WITH
LVE.

TCH BYPASS WIRES MAY BE
B. 3 PHASE MACHINES.
NNECTED WHEN MACHINE
D WITH THESE WIRES.

AY NOT BE PRESENT ON

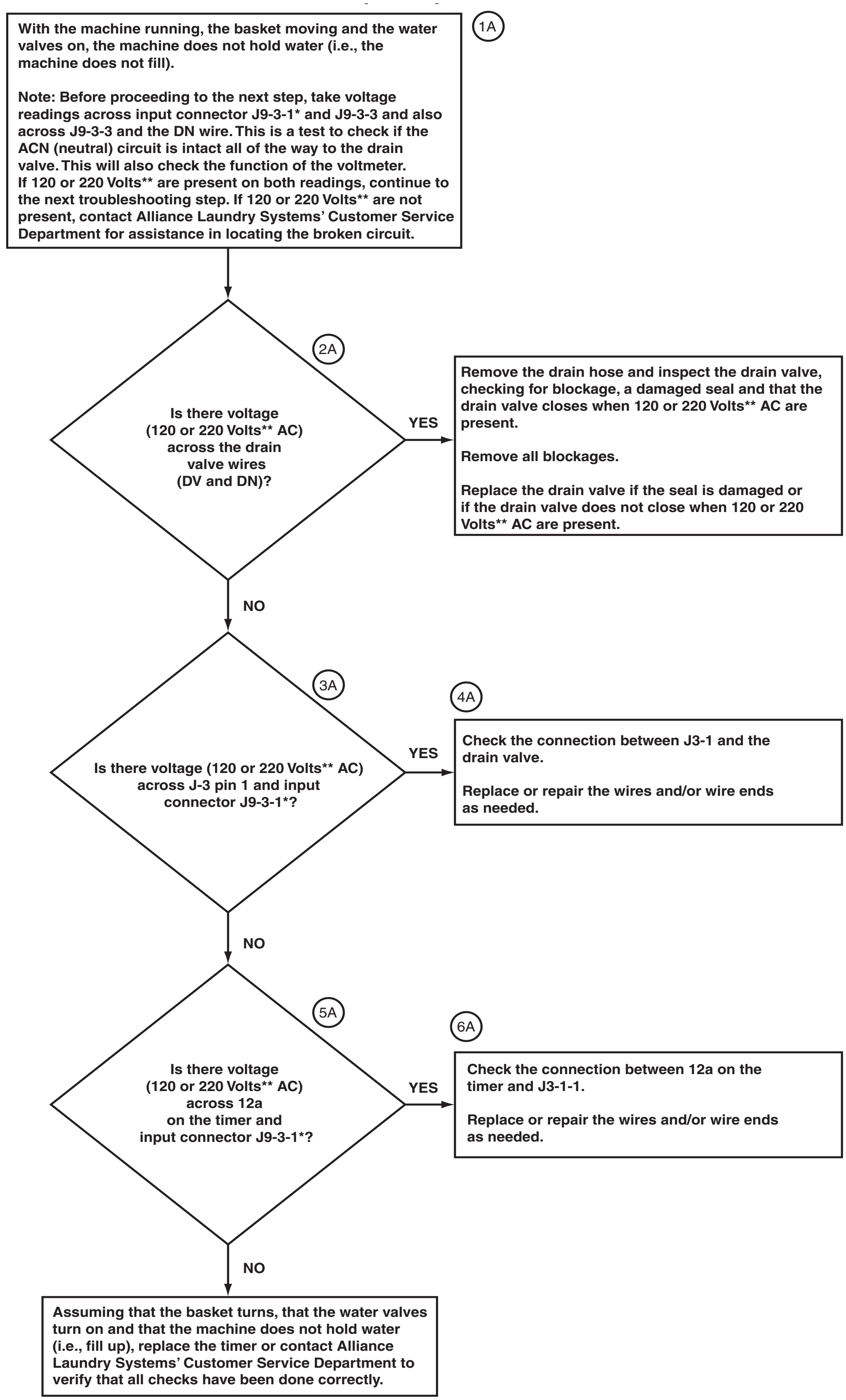
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- [32] TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- [RC] RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

CHM244S
0635913(E)

16. Drain Valve Malfunction (Coin)

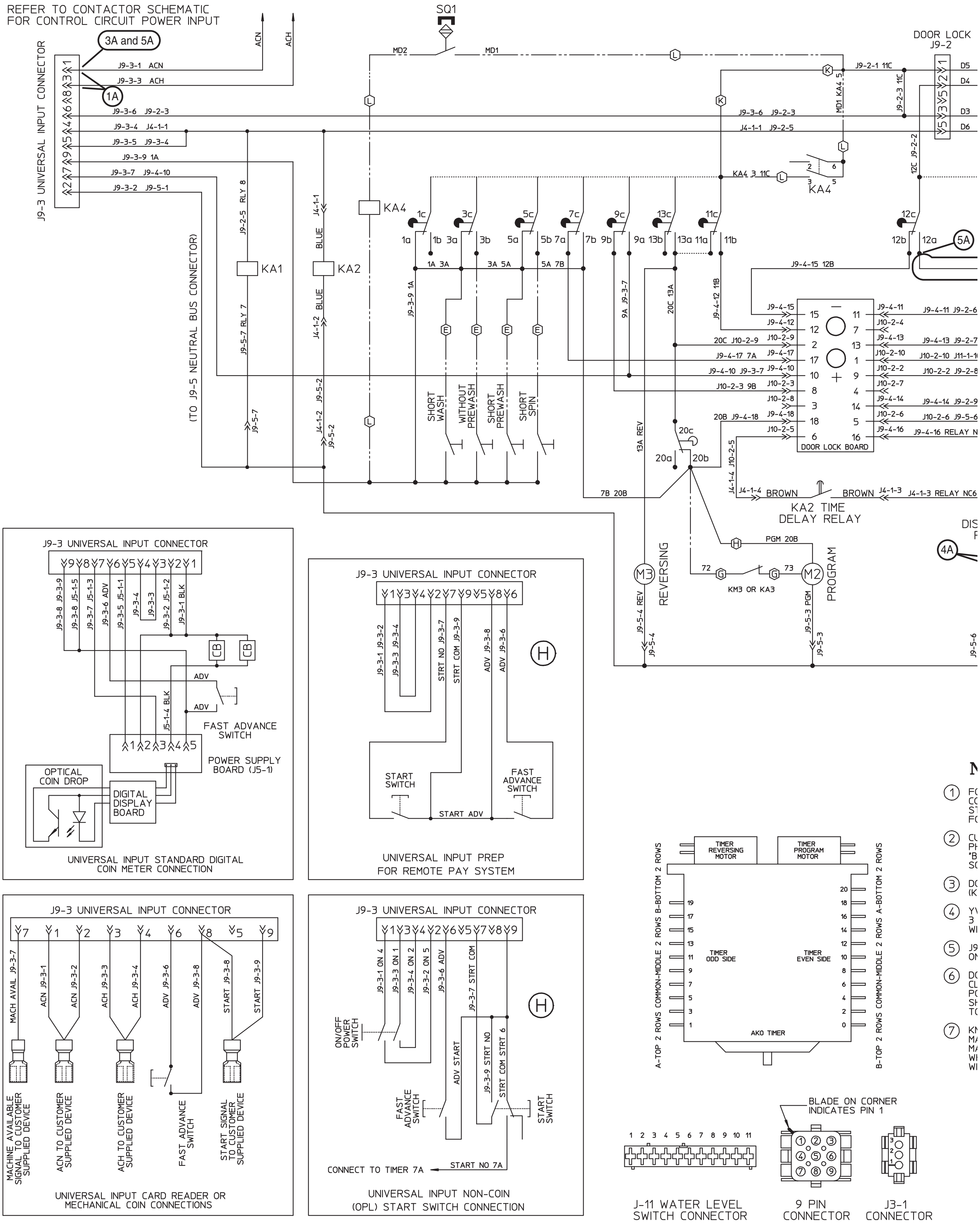


*Note: All voltage readings should be taken from J9-3-1 as a neutral point.
**Note: All voltage readings are approximate.

CHM528S

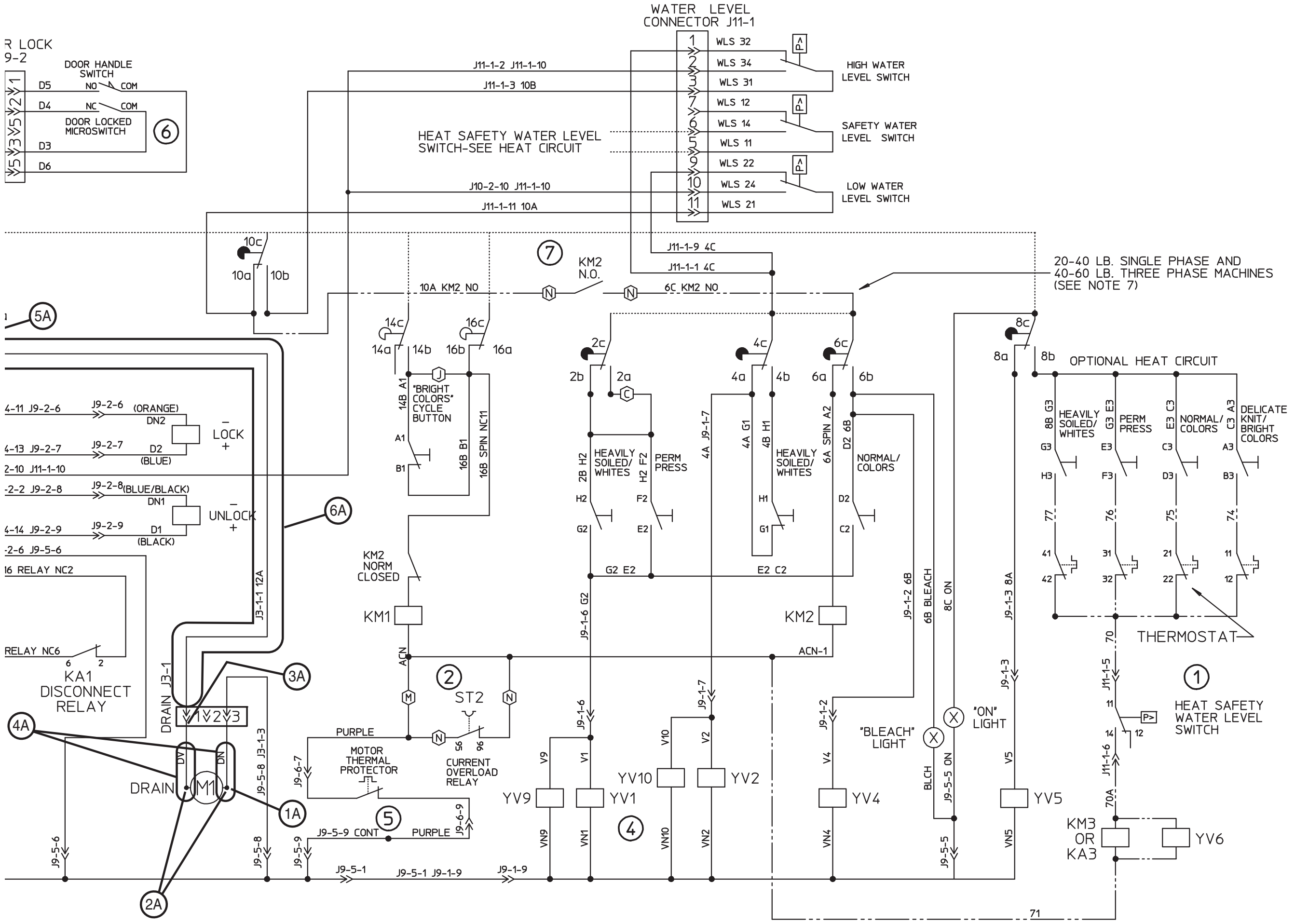
Please refer to the following 2 pages for wiring diagram information.

Drain Valve Malfunction (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Drain Valve Malfunction (Coin) (Sheet 2 of 2)



NOTES

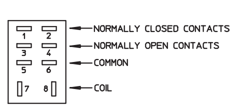
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 20 LB. "B" VOLTAGE MACHINES. SEE CONTACTOR SCHEMATIC FOR SETTING.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 40 AND 60 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.

LEGEND

- (C) CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- (E) NOT FACTORY INSTALLED
- (G) ADD CONNECTION FOR HEAT
- (H) REMOVE CONNECTION FOR HEAT
- (J) REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- (K) REMOVE CONNECTION FOR CE MARK OPTION
- (L) ADD CONNECTION FOR CE MARK OPTION
- (M) CONNECTION FOR 3 PHASE MACHINES
- (N) CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- .... CONNECTIONS INTERNAL TO DEVICE
- —·—·— OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR

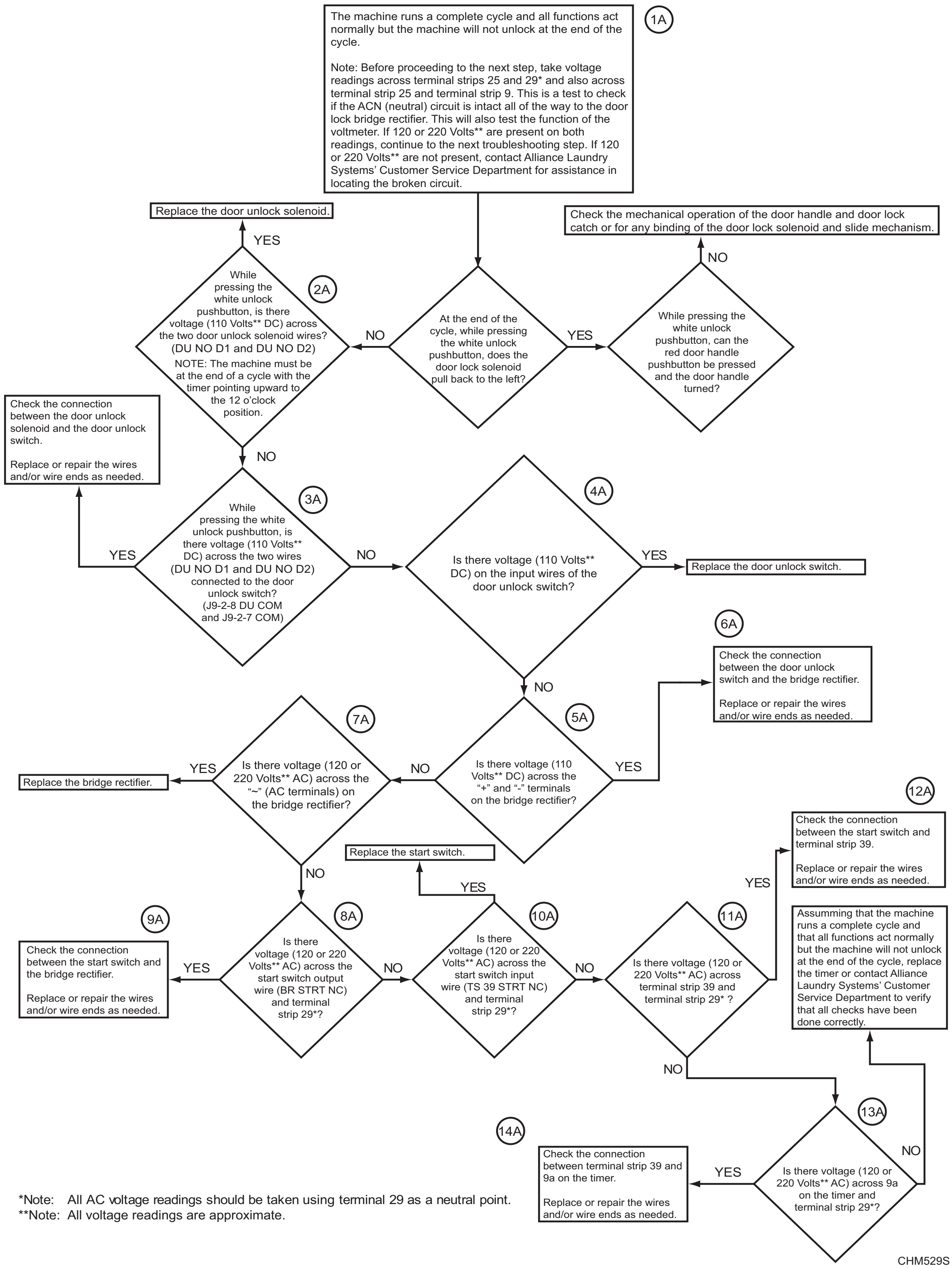
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM243S
0636156(H)

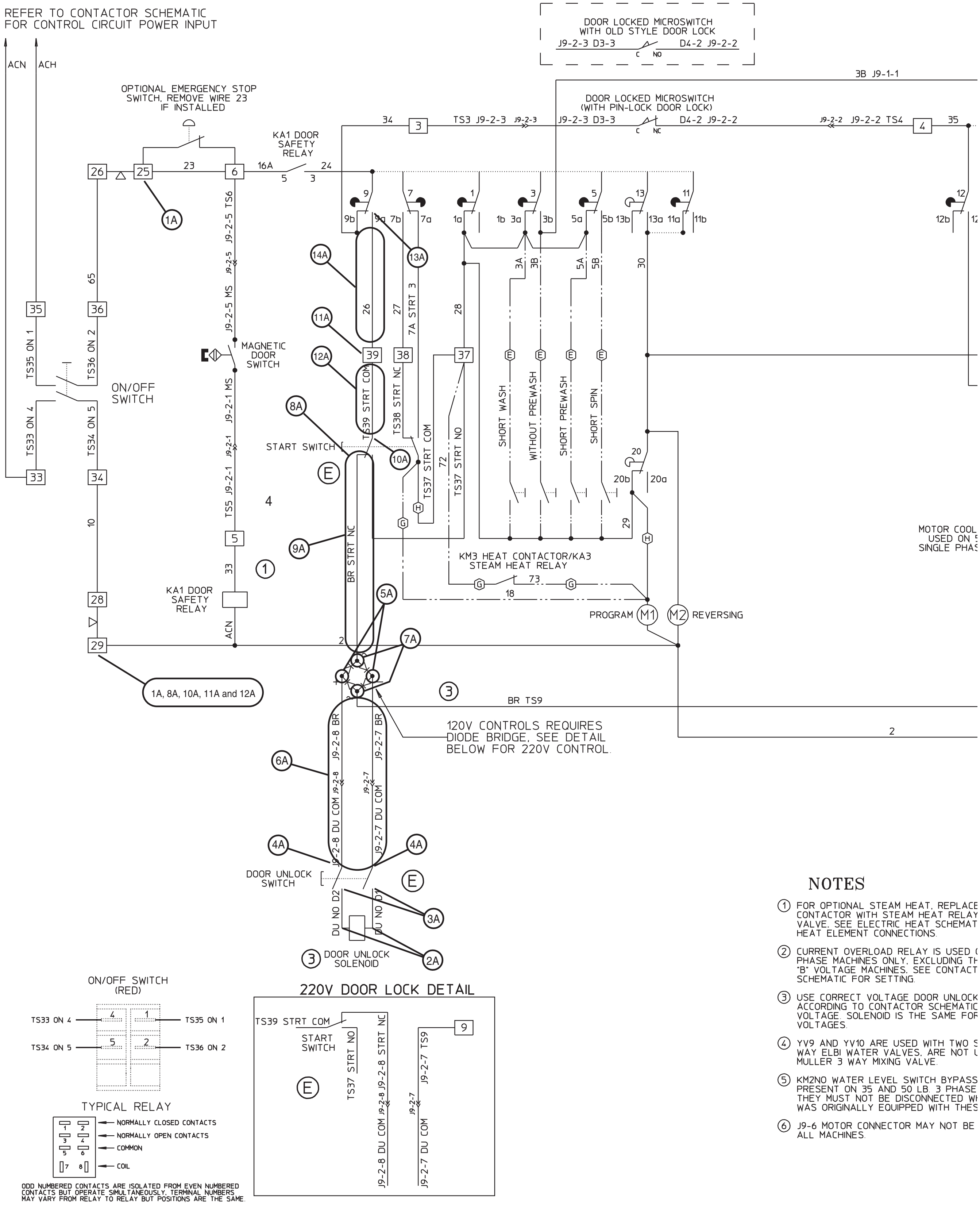
17. Door Unlocking Malfunction (OPL)



*Note: All AC voltage readings should be taken using terminal 29 as a neutral point.
**Note: All voltage readings are approximate.

Please refer to the following 2 pages for wiring diagram information.

Door Unlocking Malfunction (OPL) (Sheet 1 of 2)

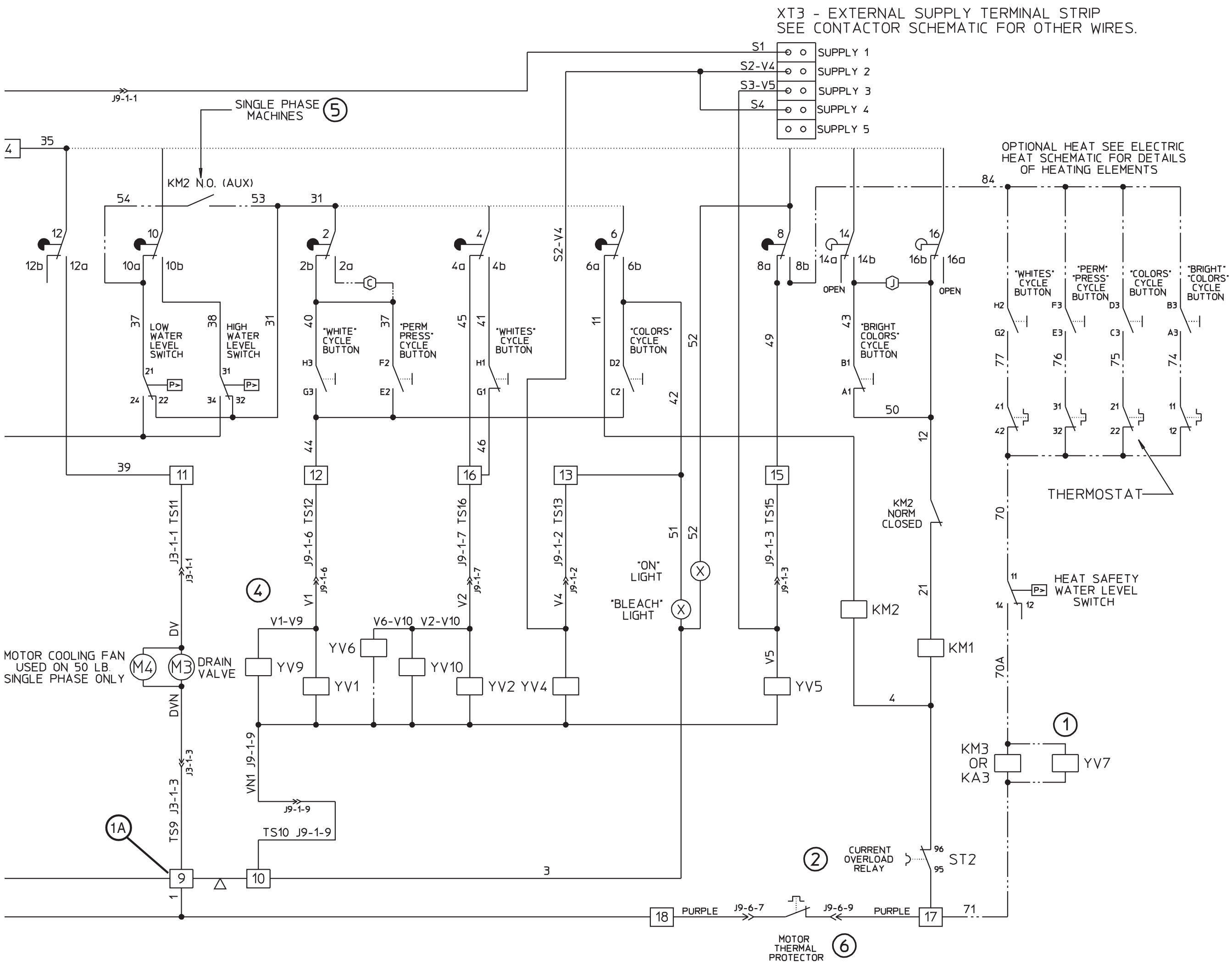


NOTES

1. FOR OPTIONAL STEAM HEAT, REPLACE CONTACTOR WITH STEAM HEAT RELAY VALVE. SEE ELECTRIC HEAT SCHEMAT HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED (PHASE MACHINES ONLY, EXCLUDING TH "B" VOLTAGE MACHINES. SEE CONTACT SCHEMATIC FOR SETTING.
3. USE CORRECT VOLTAGE DOOR UNLOCK ACCORDING TO CONTACTOR SCHEMATIC VOLTAGE. SOLENOID IS THE SAME FOR VOLTAGES.
4. YV9 AND YV10 ARE USED WITH TWO S WAY ELBI WATER VALVES, ARE NOT U MULLER 3 WAY MIXING VALVE.
5. KM2NO WATER LEVEL SWITCH BYPASS PRESENT ON 35 AND 50 LB. 3 PHASE THEY MUST NOT BE DISCONNECTED WH WAS ORIGINALLY EQUIPPED WITH THES
6. J9-6 MOTOR CONNECTOR MAY NOT BE ALL MACHINES.

NOTE: Refer to the wiring diagram supplied with your machine.

Door Unlocking Malfunction (OPL) (Sheet 2 of 2)



KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

AT, REPLACE HEAT
HEAT RELAY AND STEAM
AT SCHEMATIC FOR
ONS.

AY IS USED ON SINGLE
XCLUDING THE 20 LB.
EE CONTACTOR

OOR UNLOCK CONFIGURATION
R SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
. ARE NOT USED WITH
LVE.

TCH BYPASS WIRES MAY BE
LB. 3 PHASE MACHINES.
NNECTED WHEN MACHINE
D WITH THESE WIRES.

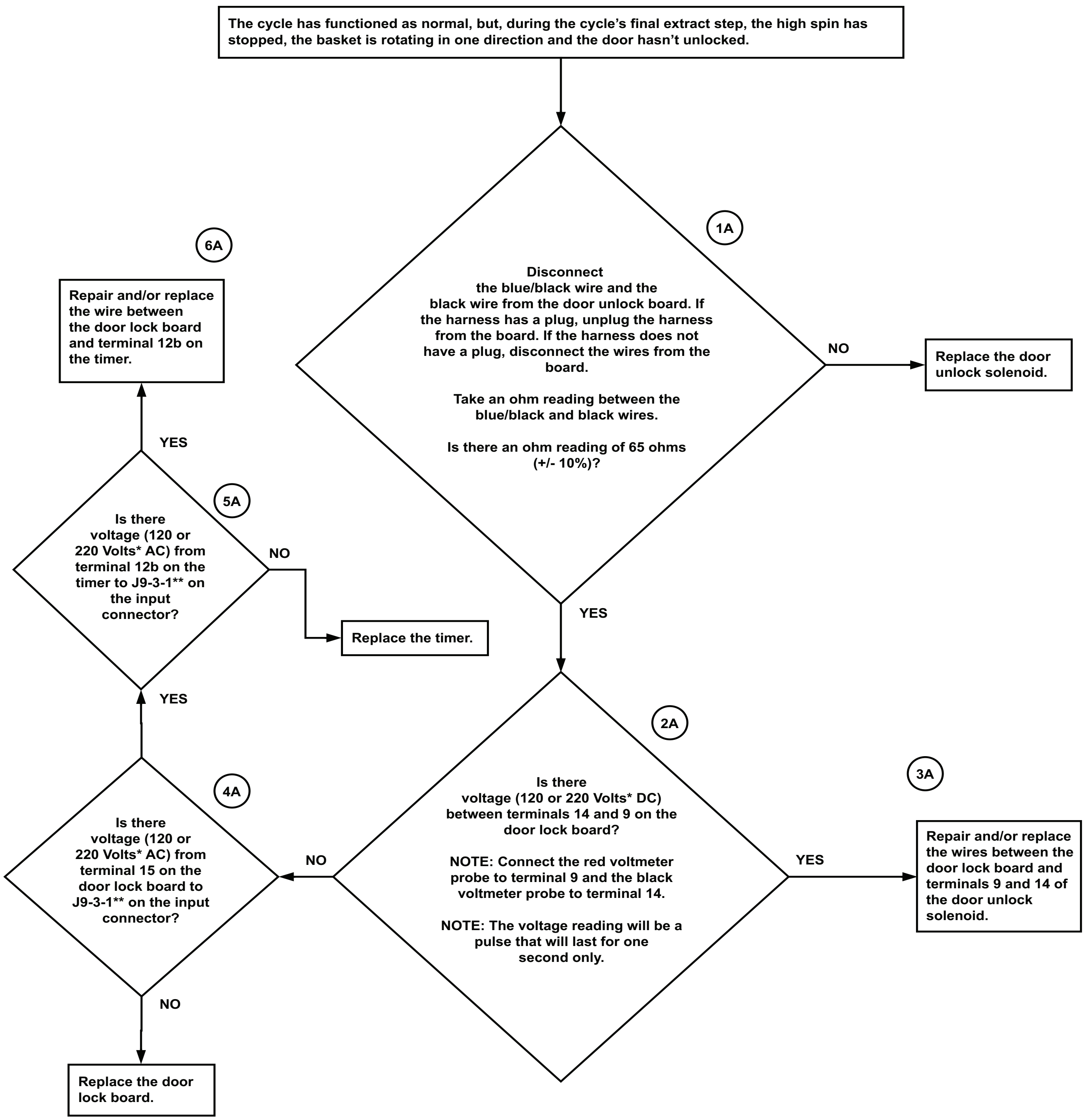
AY NOT BE PRESENT ON

LEGEND

- (C) CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- (E) NOT FACTORY INSTALLED
- (G) ADD CONNECTION FOR HEAT
- (H) REMOVE CONNECTION FOR HEAT
- (J) REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- [32] TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- [RC] RESISTOR/CAPACITOR NETWORK

CHM246S
0635913(E)

18. Door Unlocking Malfunction (Coin)



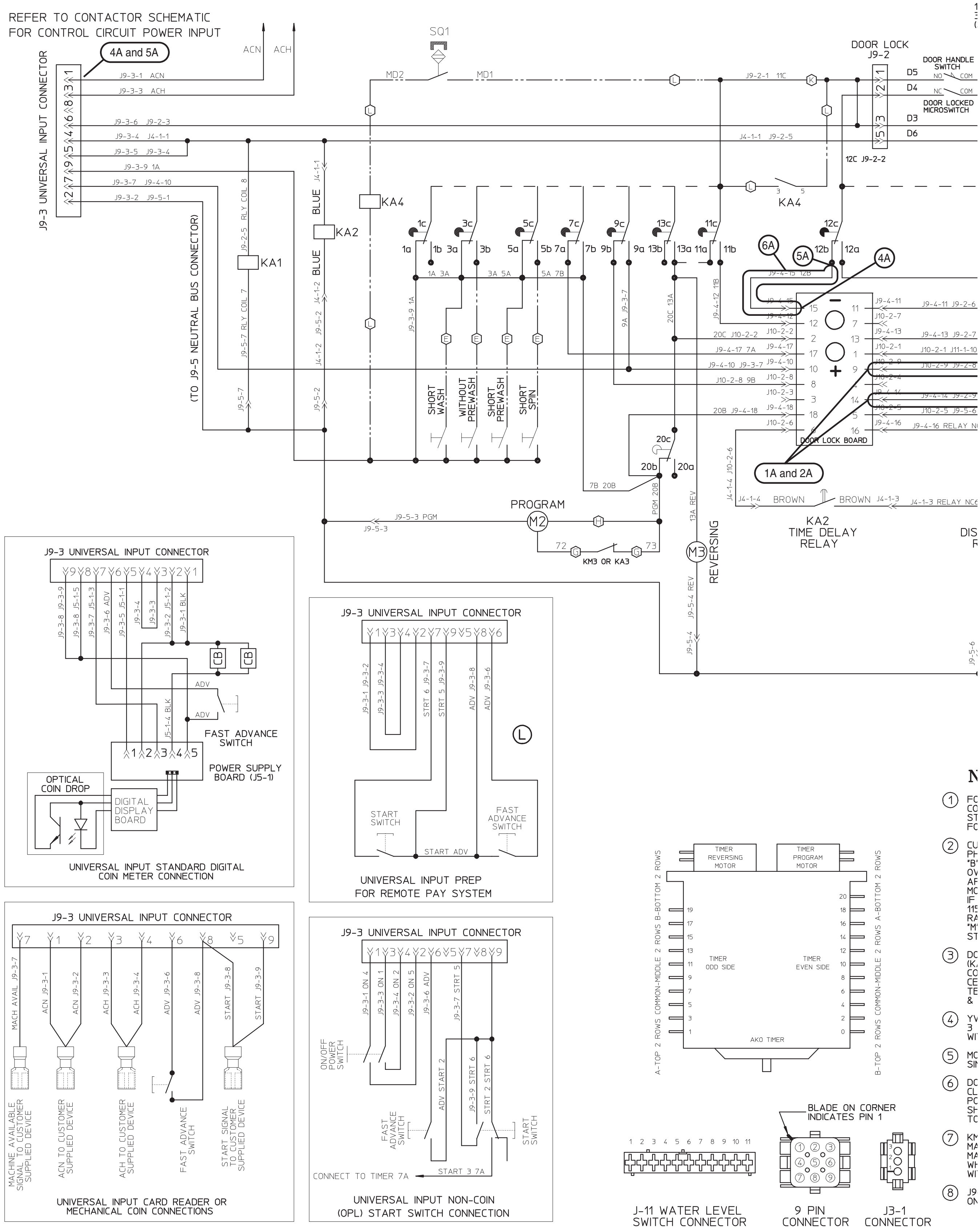
*Note: All voltage readings are approximate.

** Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.

CHM530S

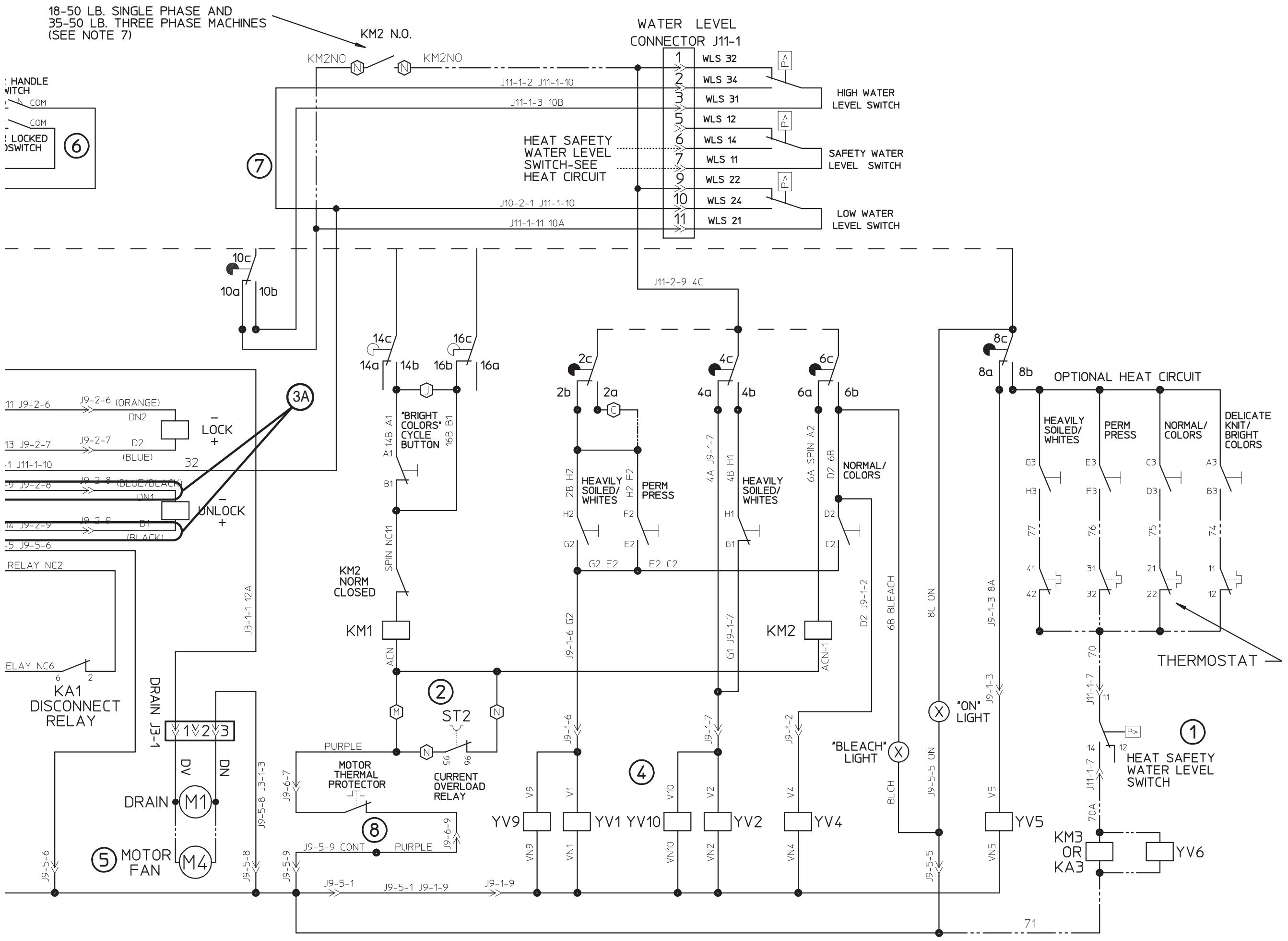
Please refer to the following 2 pages for wiring diagram information.

Door Unlocking Malfunction (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Door Unlocking Malfunction (Coin) (Sheet 2 of 2)



NOTES

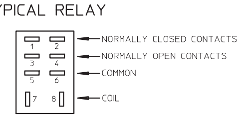
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 18 LB. "B" AND "E" VOLTAGE MACHINES. ST2 CURRENT OVERLOAD RELAY MUST BE SET TO "TRIP" AT APPROPRIATE CURRENT LOAD. SET DIAL TO MOTOR NAMEPLATE FULL LOAD CURRENT RATING. IF MOTOR HAS SERVICE FACTOR OF LESS THAN 115, SET DIAL TO 90% OF FULL LOAD CURRENT RATING. ALSO SET OPERATING MODE DIAL TO "M" (MANUAL RESET) TO PREVENT ACCIDENTAL STARTING OF MOTOR.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY. CONNECT WIRE "D6" TO DOOR SAFETY RELAY FOR CE UNITS, OTHERWISE CONNECT WIRE D6 TO TERMINAL STRIP TERM #6 WHEN MAGNETIC SWITCH & SAFETY RELAY ARE NOT USED.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. MOTOR COOLING FAN IS ONLY USED ON 50LB. SINGLE PHASE MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 35 AND 50 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.
8. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- — — — CONNECTIONS INTERNAL TO DEVICE
- —··—··— OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR
M4 - OPTIONAL MOTOR FAN *C50 1Ø

TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM326S
0634311(I)

19. Water Running Continuously with Machine Power Off

With electrical power removed from the machine, water is running continuously into compartment 1 of the supply dispenser.

↓

Using the "Water Running Continuously" illustration, follow the hose from compartment 1 of the supply dispenser back through the vacuum breaker and the Y-connector to the hot water valve at V9 and the cold water valve at V10.

To determine which of the valves is leaking, turn off the water supply to each of the valves, one valve at a time. When the water supply is removed from the leaking valve, the water running into compartment 1 of the supply dispenser will stop.

For example, if water is running into compartment 1 of the supply dispenser continuously, when the water supply is removed from the hot water valve, the water continues to run into compartment 1. However, when the water supply is removed from the cold water valve, the water running into compartment 1 stops. Therefore, the cold water valve is the leaking valve.

↓

Once the leaking valve(s) has been determined, install a valve repair kit onto the leaking valve port or replace the entire leaking valve. Refer to the Parts manual for your washer-extractor for valve and valve repair kit part numbers.

With electrical power removed from the machine, water is running continuously into compartment 2 of the supply dispenser.

↓

Using the "Water Running Continuously" illustration, follow the hose from compartment 2 of the supply dispenser back through the vacuum breaker to the cold water valve at V4.

↓

Install a valve repair kit onto the cold water valve or replace the valve. Refer to the Parts manual for your washer-extractor for valve and valve repair kit part numbers.

With electrical power removed from the machine, water is running continuously into compartment 3 of the supply dispenser.

↓

Using the "Water Running Continuously" illustration, follow the hose from compartment 3 of the supply dispenser back through the vacuum breaker to the cold water valve at V5.

↓

Install a valve repair kit onto the hot water valve or replace the valve. Refer to the Parts manual for your washer-extractor for valve and valve repair kit part numbers.

With electrical power removed from the machine, water is running continuously into the bottom of the washer-extractor.

↓

To determine which of the valves is leaking, turn off the water supply to each of the valves, one valve at a time. When the water supply is removed from the leaking valve, the water running into the bottom of the washer-extractor will stop.

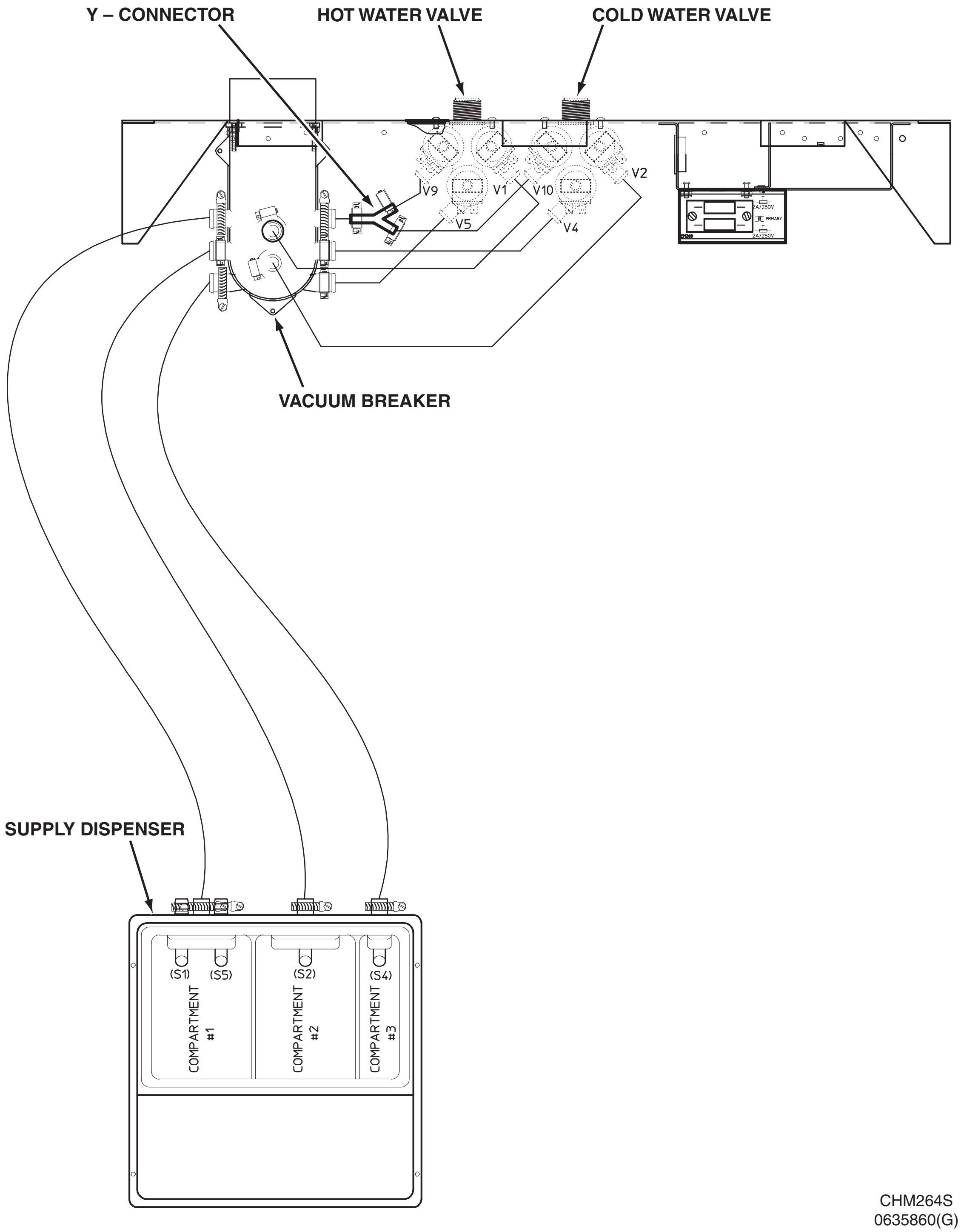
For example, when the water supply is removed from the hot water valve at V1, the water continues to run into the bottom of the washer-extractor. However, when the water supply is removed from the cold water valve at V2, the water running into the bottom of the washer-extractor stops. Therefore, the cold water valve at V2 is the leaking valve.

↓

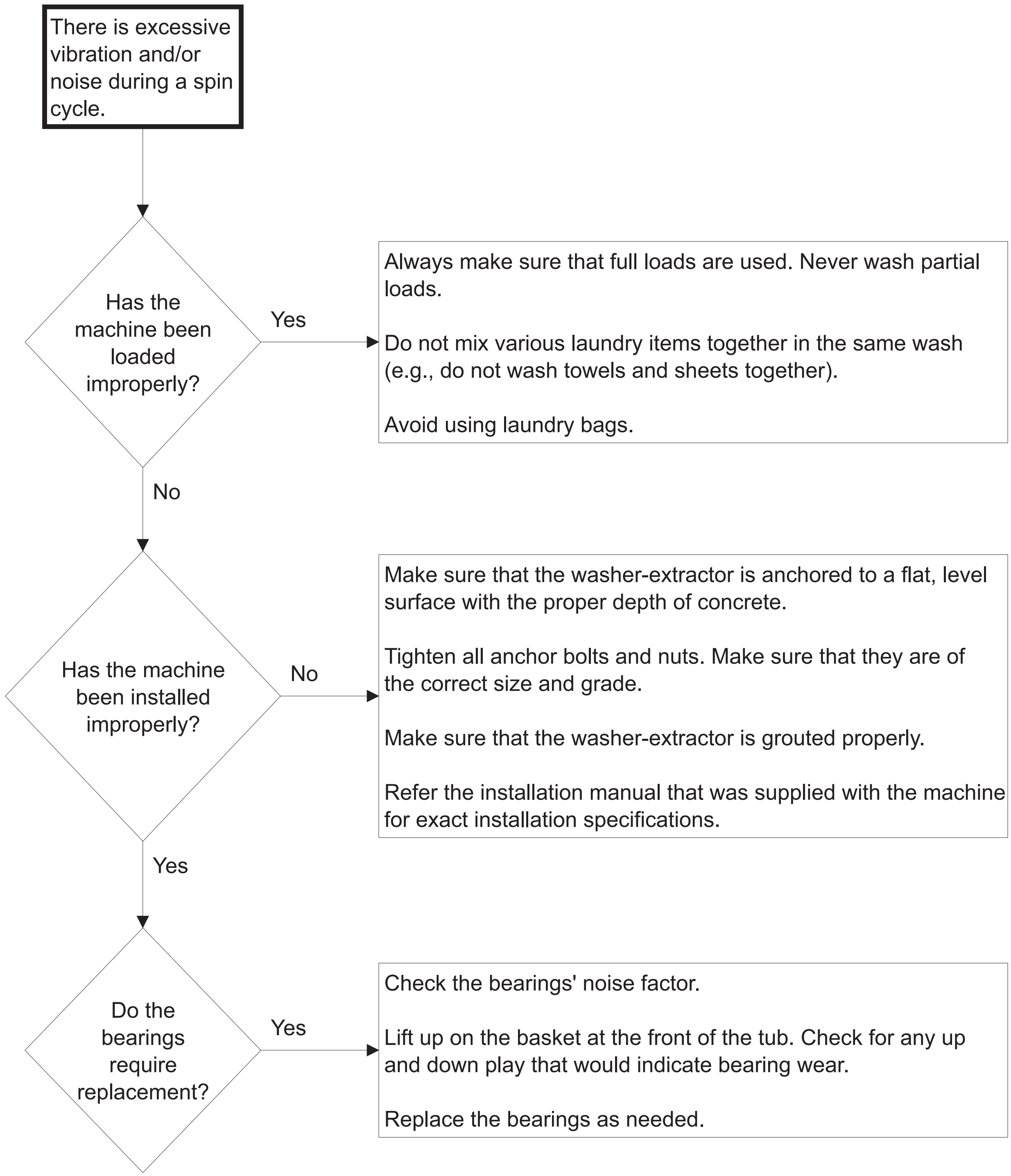
Once the leaking valve(s) has been determined, install a valve repair kit onto the leaking valve or replace the leaking valve. Refer to the Parts manual for your washer-extractor for valve and valve repair kit part numbers.

CHM263S

Water Running Continuously Illustration

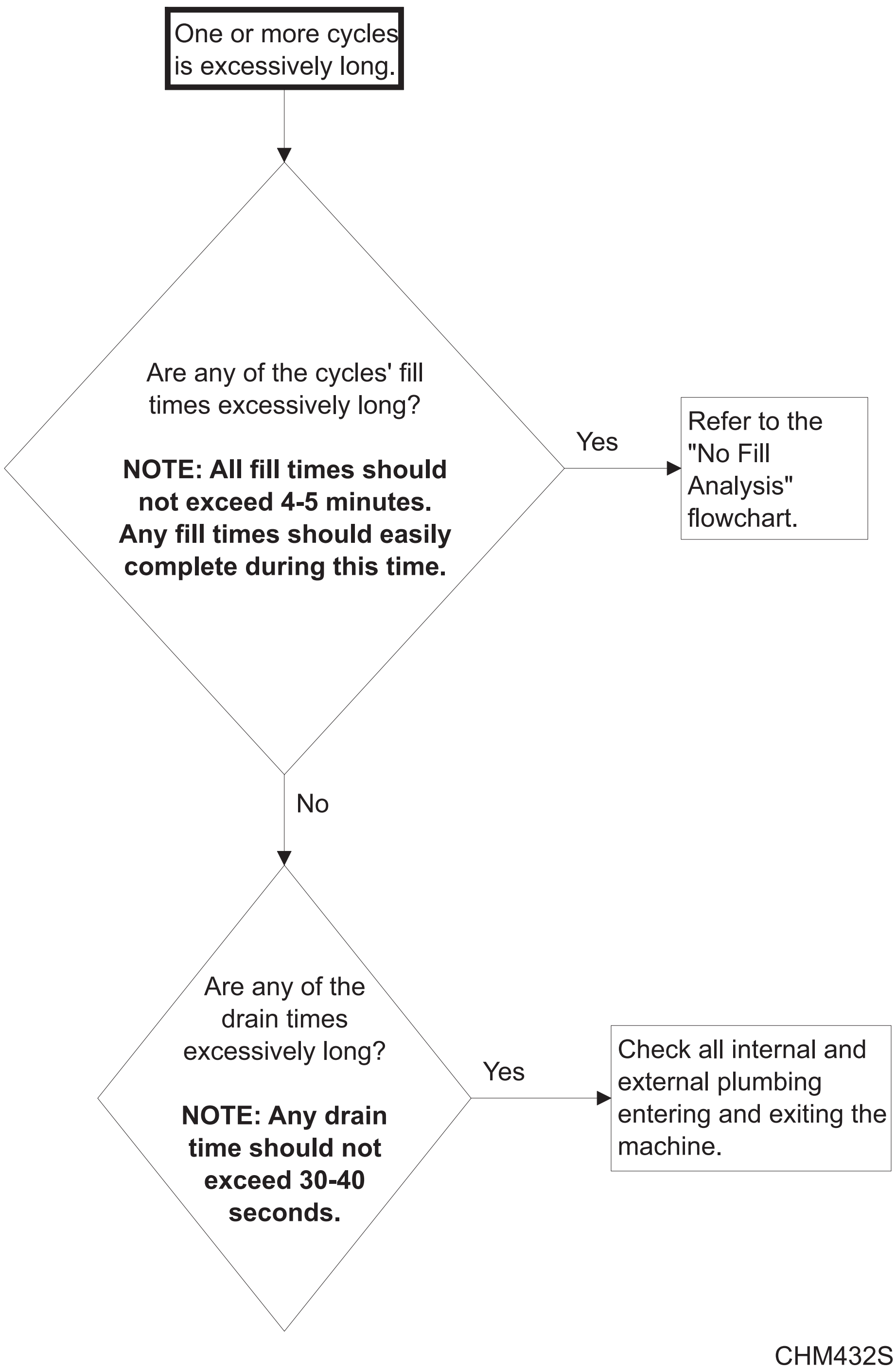


20. Excessive Vibration and/or Noise During Spin

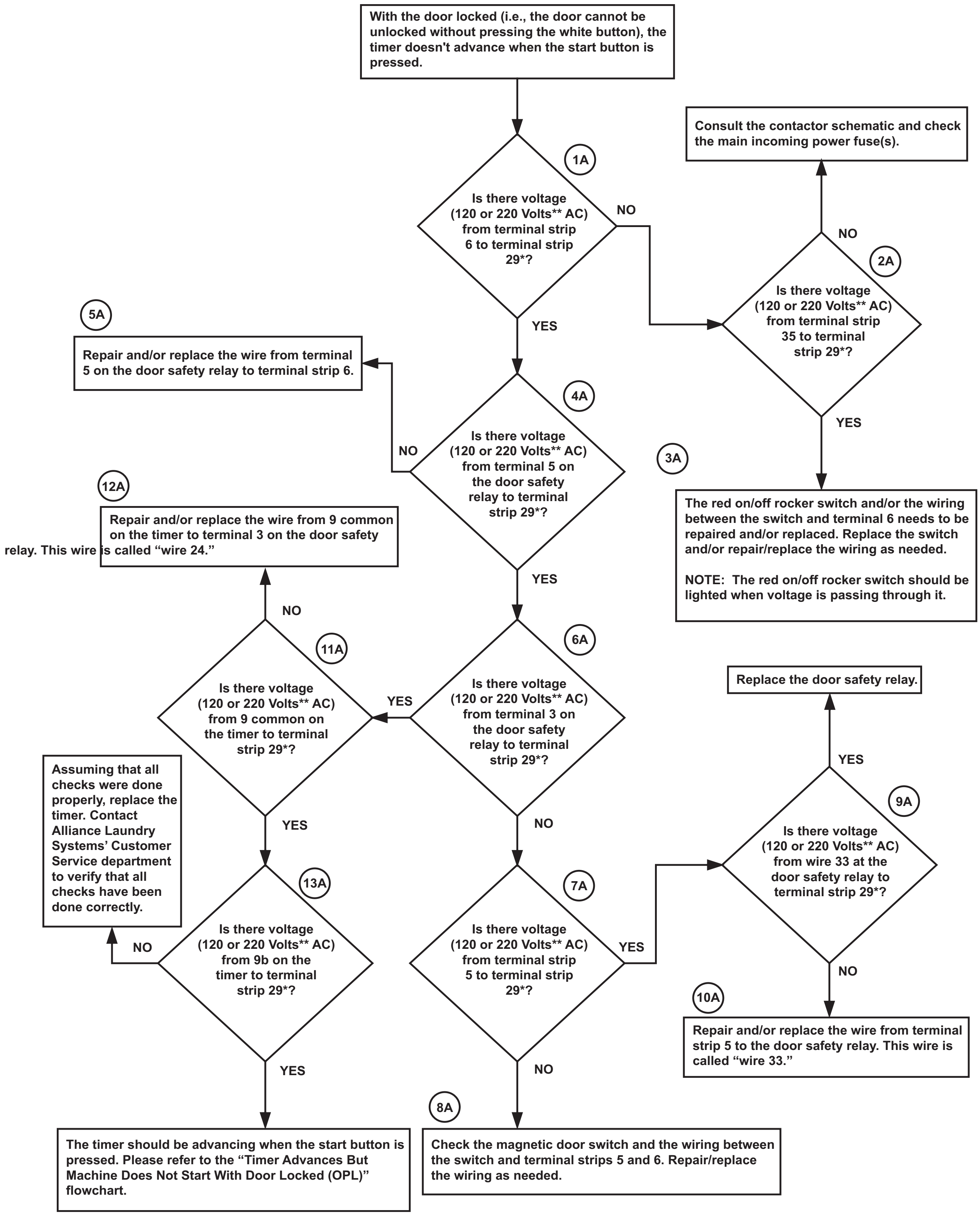


CHM431S

21. Excessive Cycle Time



22. Machine Timer Won't Advance with Door Locked (OPL)

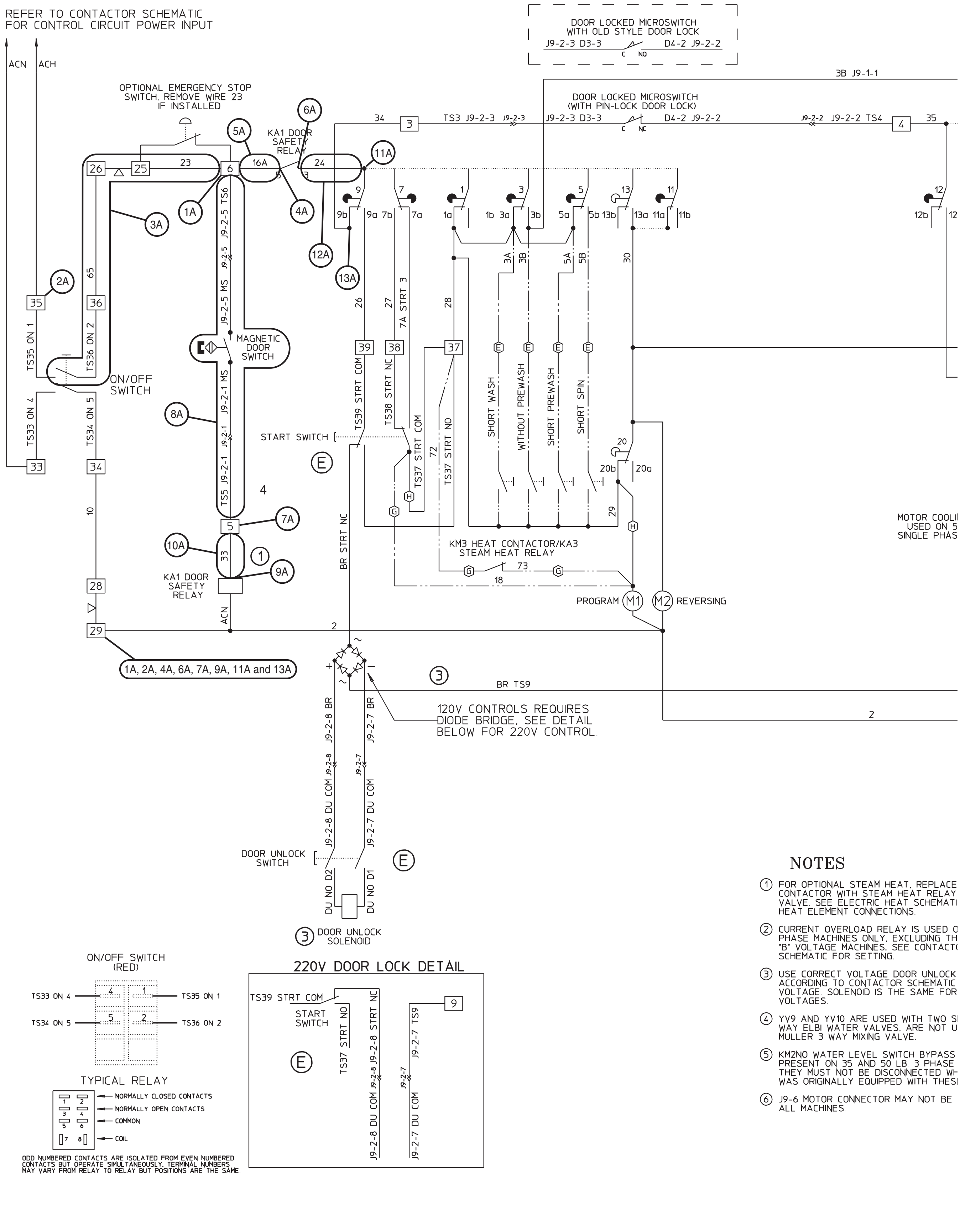


*Note: All voltage readings should be taken from terminal 29 as a neutral point.
**Note: All voltage readings are approximate.

CHM531S

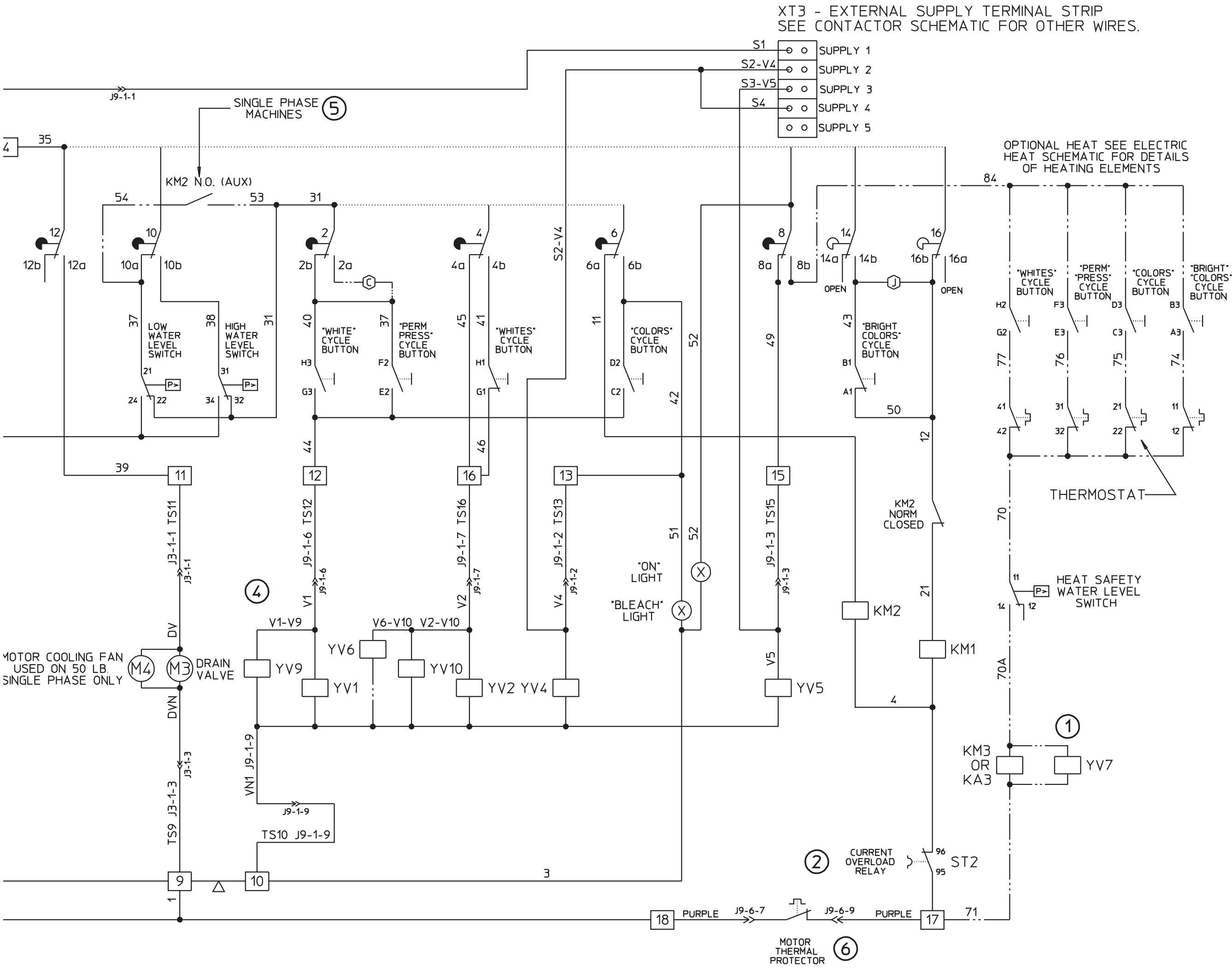
Please refer to the following 2 pages for wiring diagram information.

Machine Timer Won't Advance with Door Locked (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Machine Timer Won’t Advance with Door Locked (OPL) (Sheet 2 of 2)



KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

AT, REPLACE HEAT
HEAT RELAY AND STEAM
AT SCHEMATIC FOR
ONS.

Y IS USED ON SINGLE
XCLUDING THE 20 LB.
EE CONTACTOR

OOR UNLOCK CONFIGURATION
R SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
. ARE NOT USED WITH
LVE.

TCH BYPASS WIRES MAY BE
LB. 3 PHASE MACHINES.
NNECTED WHEN MACHINE
D WITH THESE WIRES.

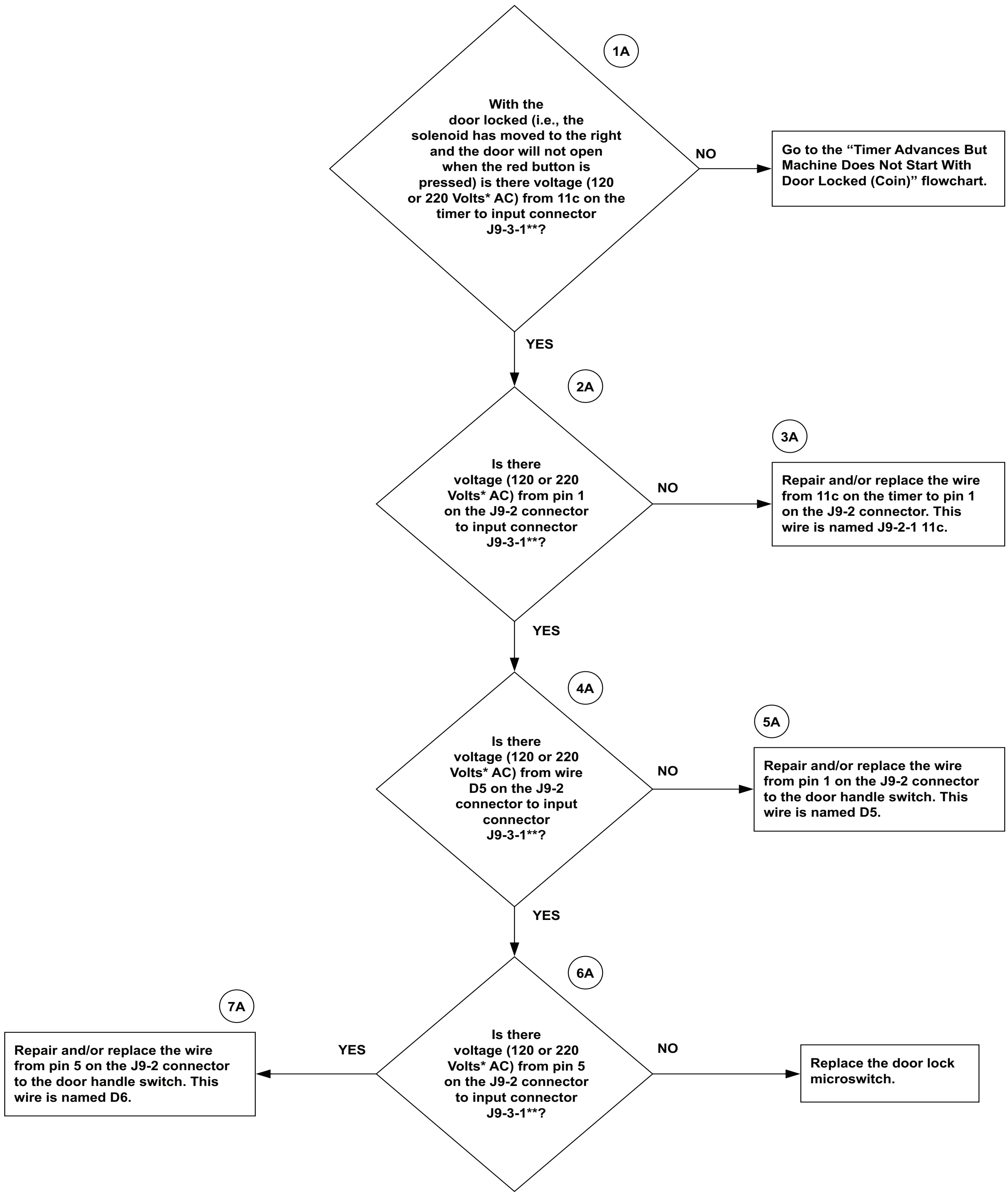
MAY NOT BE PRESENT ON

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

CHM286S
0635913(E)

23. Machine Timer Won’t Advance with Door Locked (Coin)

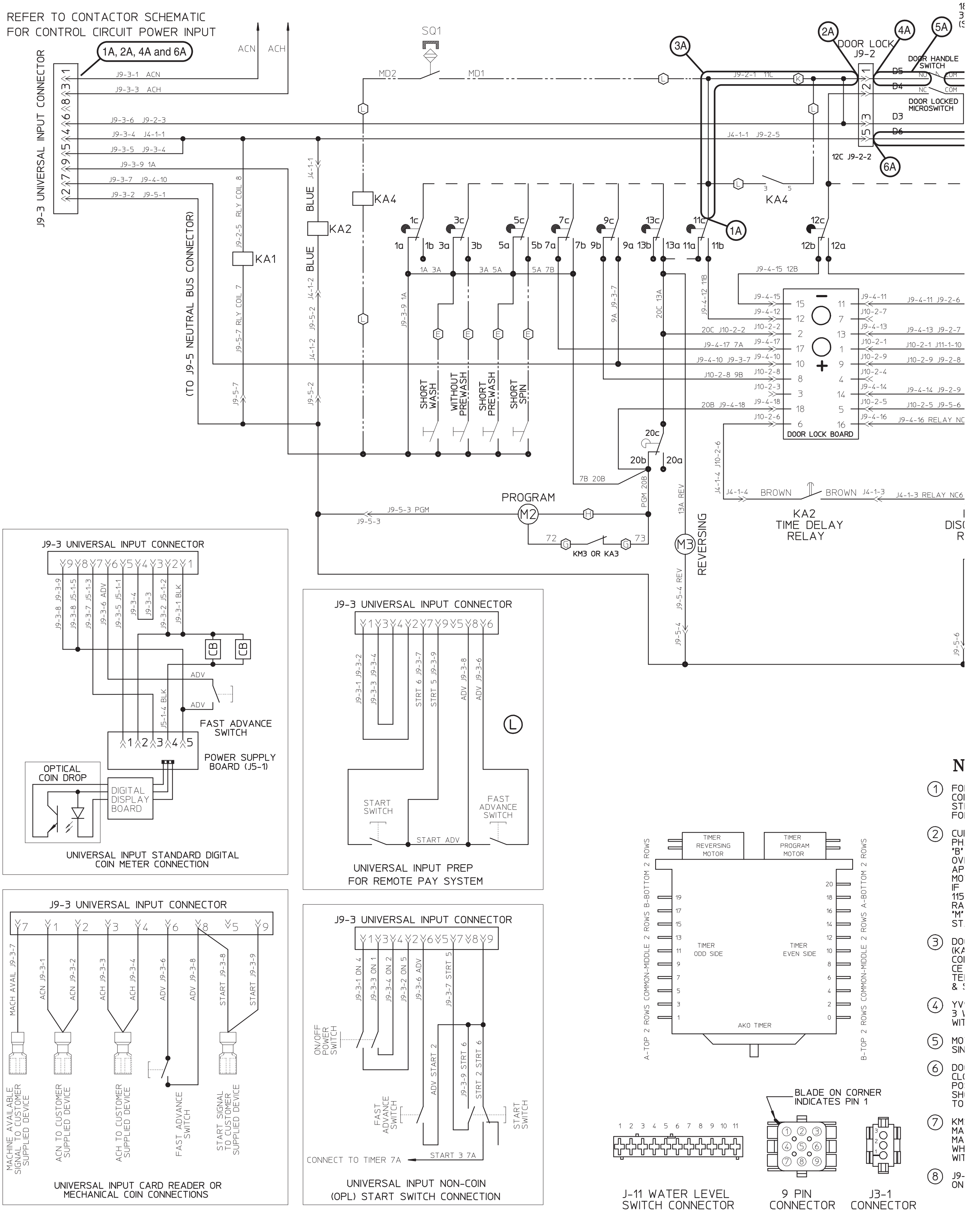


*Note: All voltage readings are approximate.
** Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.

CHM532S

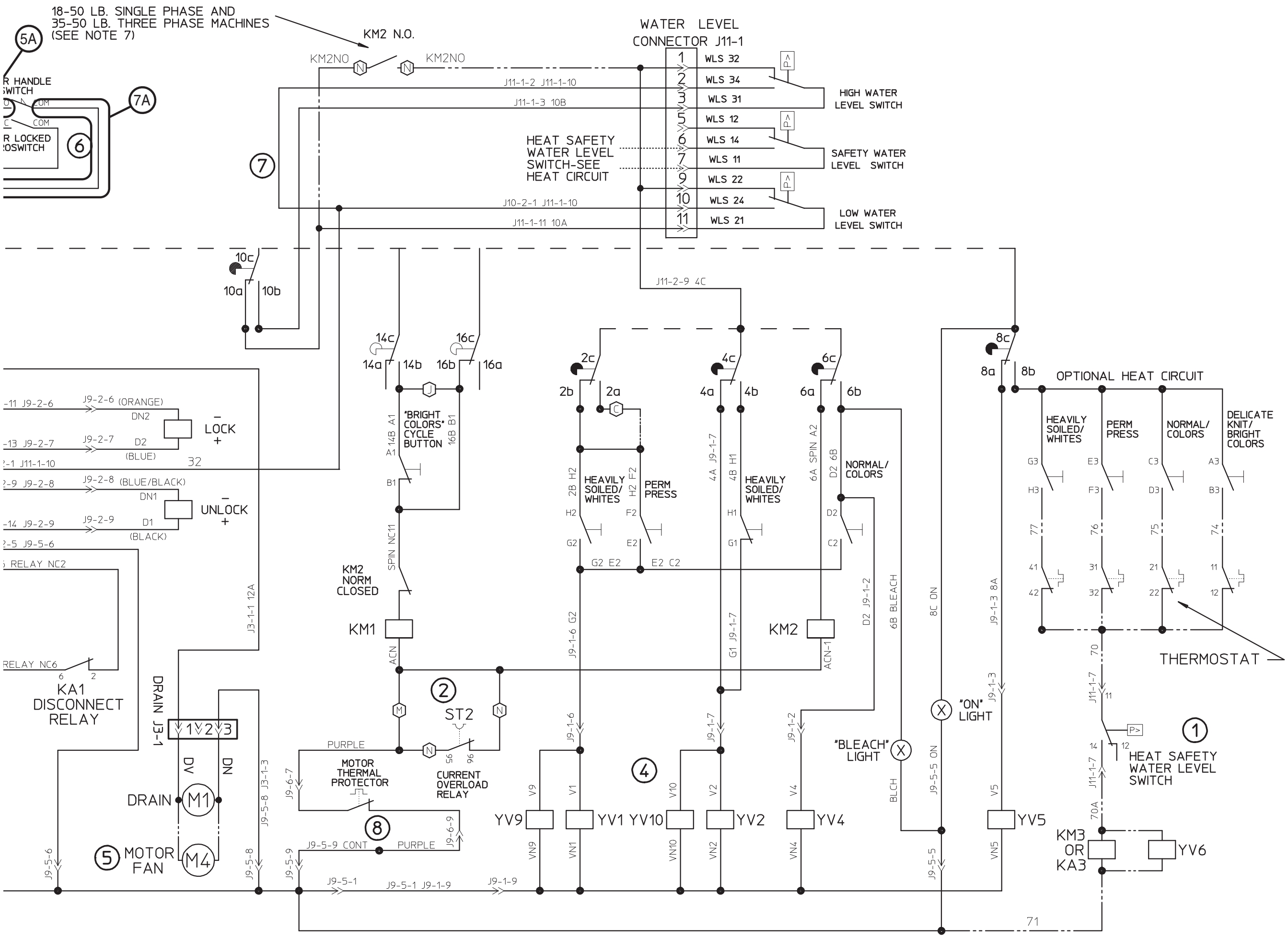
Please refer to the following 2 pages for wiring diagram information.

Machine Timer Won't Advance with Door Locked (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Machine Timer Won’t Advance with Door Locked (Coin) (Sheet 2 of 2)



NOTES

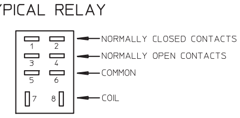
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 18 LB. "B" AND "E" VOLTAGE MACHINES. ST2 CURRENT OVERLOAD RELAY MUST BE SET TO "TRIP" AT APPROPRIATE CURRENT LOAD. SET DIAL TO MOTOR NAMEPLATE FULL LOAD CURRENT RATING. IF MOTOR HAS SERVICE FACTOR OF LESS THAN 115, SET DIAL TO 90% OF FULL LOAD CURRENT RATING. ALSO SET OPERATING MODE DIAL TO "M" (MANUAL RESET) TO PREVENT ACCIDENTAL STARTING OF MOTOR.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY. CONNECT WIRE "D6" TO DOOR SAFETY RELAY FOR CE UNITS, OTHERWISE CONNECT WIRE D6 TO TERMINAL STRIP TERM #6 WHEN MAGNETIC SWITCH & SAFETY RELAY ARE NOT USED.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. MOTOR COOLING FAN IS ONLY USED ON 50LB. SINGLE PHASE MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 35 AND 50 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.
8. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- — — — CONNECTIONS INTERNAL TO DEVICE
- —··—··— OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR
M4 - OPTIONAL MOTOR FAN *C50 1Ø

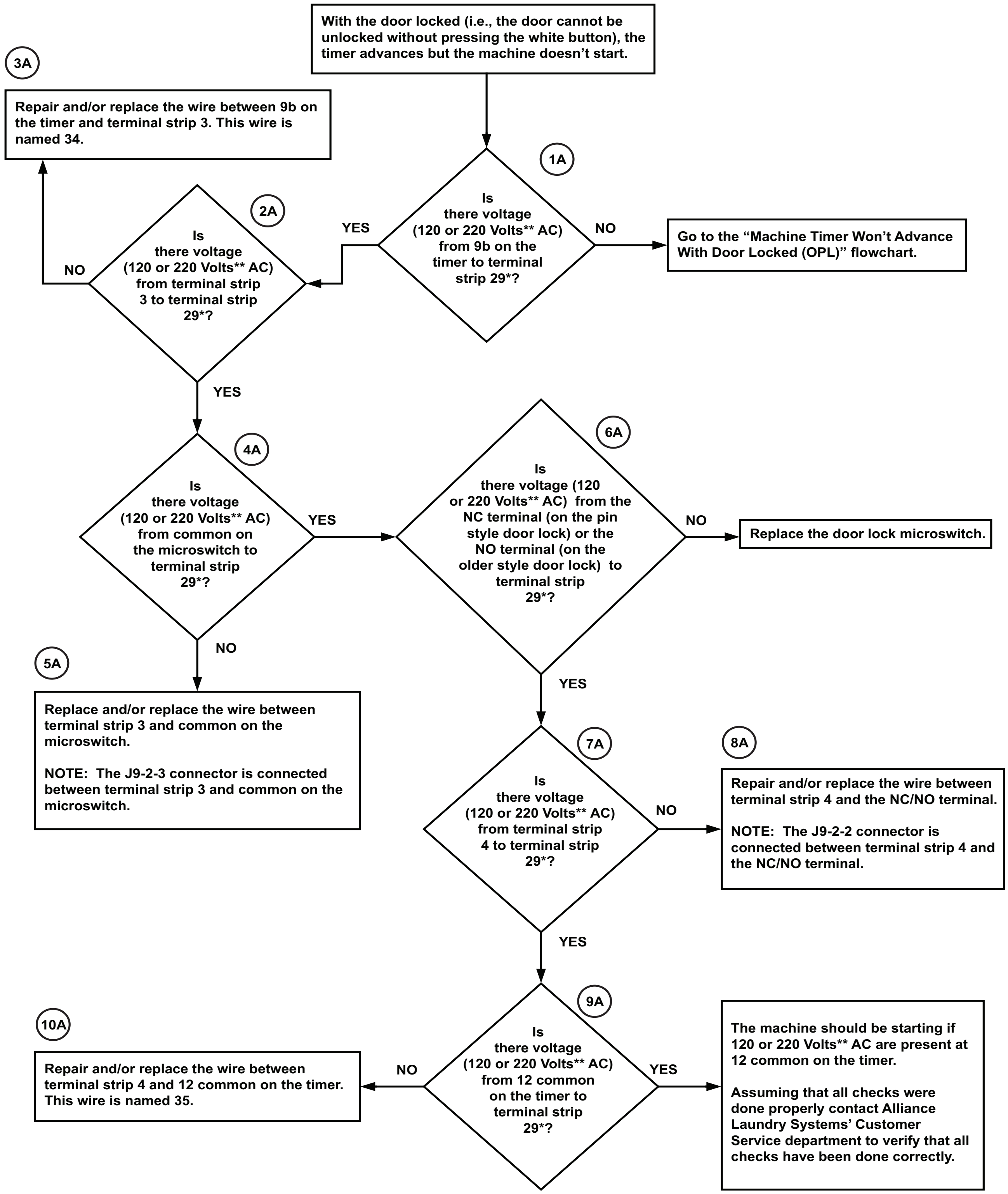
TYPICAL RELAY



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

CHM324S
0634311(I)

24. Timer Advances But Machine Does Not Start with Door Locked (OPL)



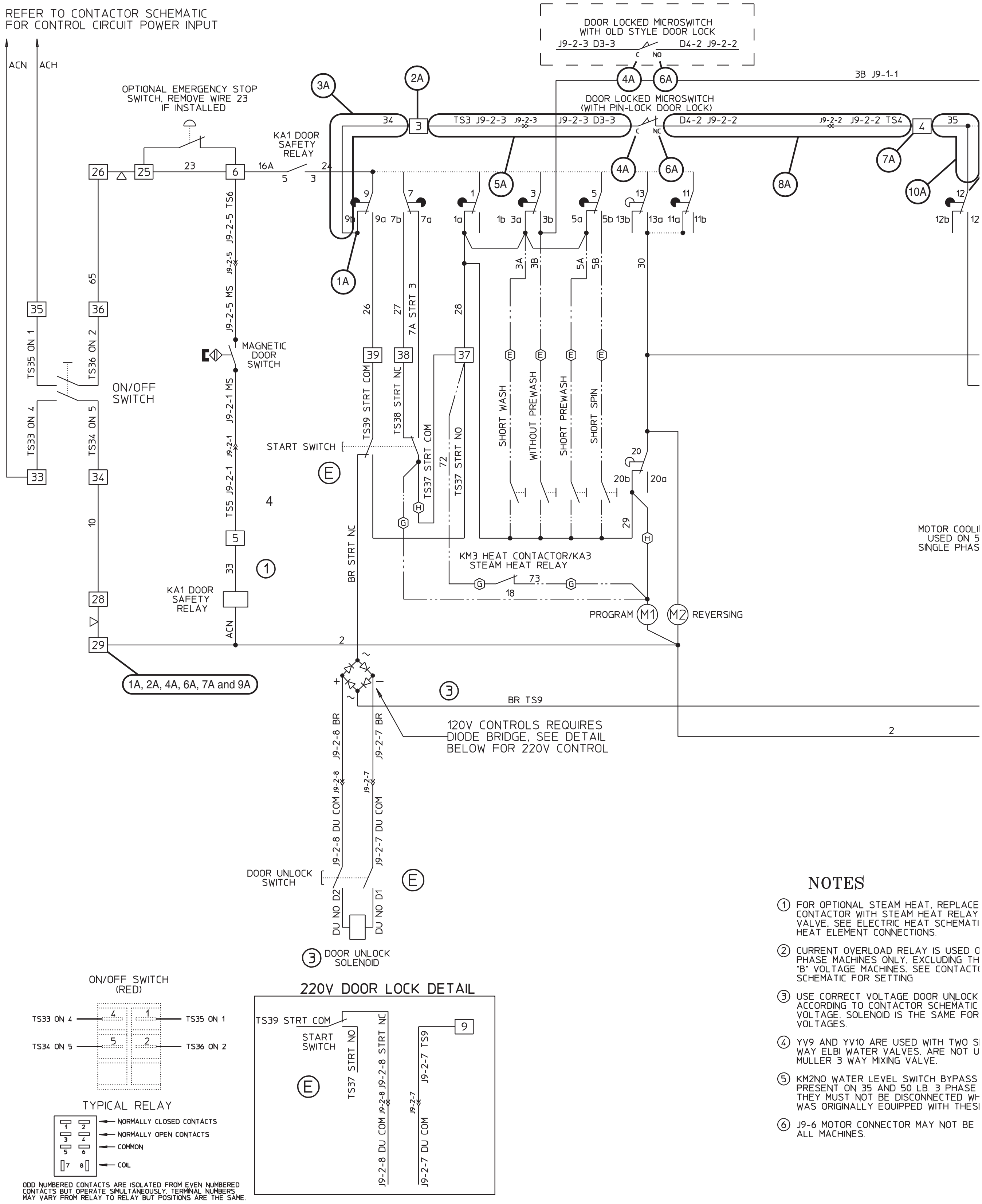
*Note: All voltage readings should be taken from terminal 29 as a neutral point.

**Note: All voltage readings are approximate.

CHM533S

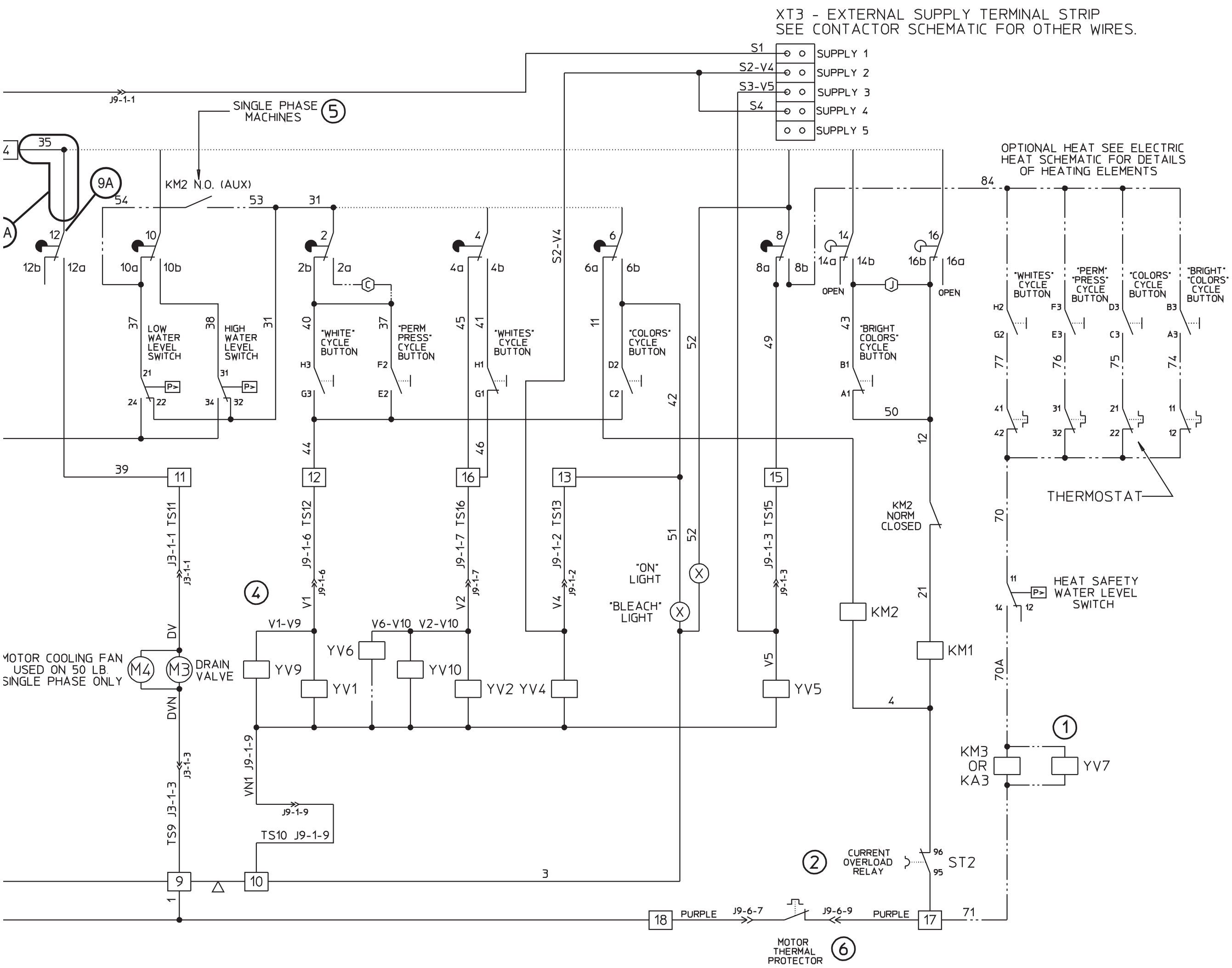
Please refer to the following 2 pages for wiring diagram information.

Timer Advances But Machine Does Not Start with Door Locked (OPL) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Timer Advances But Machine Does Not Start with Door Locked (OPL) (Sheet 2 of 2)



AT, REPLACE HEAT
HEAT RELAY AND STEAM
AT SCHEMATIC FOR
ONS.

Y IS USED ON SINGLE
XCLUDING THE 20 LB.
EE CONTACTOR

OOR UNLOCK CONFIGURATION
R SCHEMATIC CONTROL
E SAME FOR BOTH

WITH TWO SEPARATE 3
. ARE NOT USED WITH
LVE.

TCH BYPASS WIRES MAY BE
LB. 3 PHASE MACHINES.
NNECTED WHEN MACHINE
D WITH THESE WIRES.

MAY NOT BE PRESENT ON

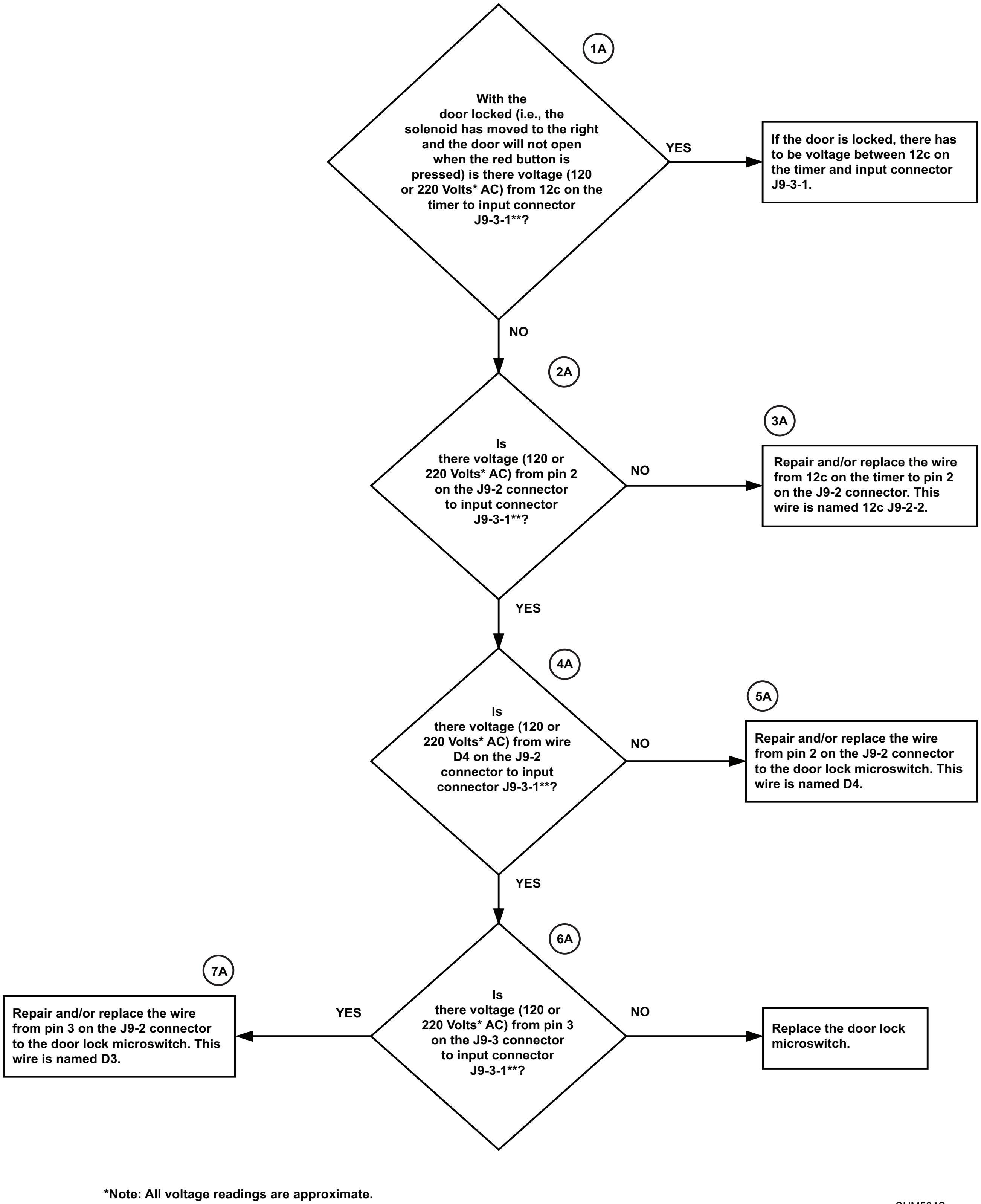
LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN BRIGHT COLORS CYCLE
- TERMINAL STRIP JUMPER
- 32 TERMINAL STRIP CONNECTION
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- CONNECTIONS INTERNAL TO DEVICE
- OPTIONAL CONNECTIONS
- RC RESISTOR/CAPACITOR NETWORK

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL ELECTRIC HEAT CONTACTOR
KA1 - DOOR SAFETY RELAY
KA3 - STEAM RELAY
M1 - TIMER PROGRAM MOTOR
M2 - TIMER REVERSING MOTOR
M3 - DRAIN VALVE MOTOR
M4 - OPTIONAL MOTOR FAN
ST2 - MOTOR CURRENT OVERLOAD RELAY
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2(BLEACH) VALVE
YV5 - SUPPLY 3(SOFTENER) VALVE
YV6 - OPTIONAL 3RD SUPPLY INLET VALVE
YV7 - OPTIONAL STEAM VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
XT3 - EXTERNAL SUPPLY TERMINAL STRIP

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25. Timer Advances But Machine Does Not Start with Door Locked (Coin)

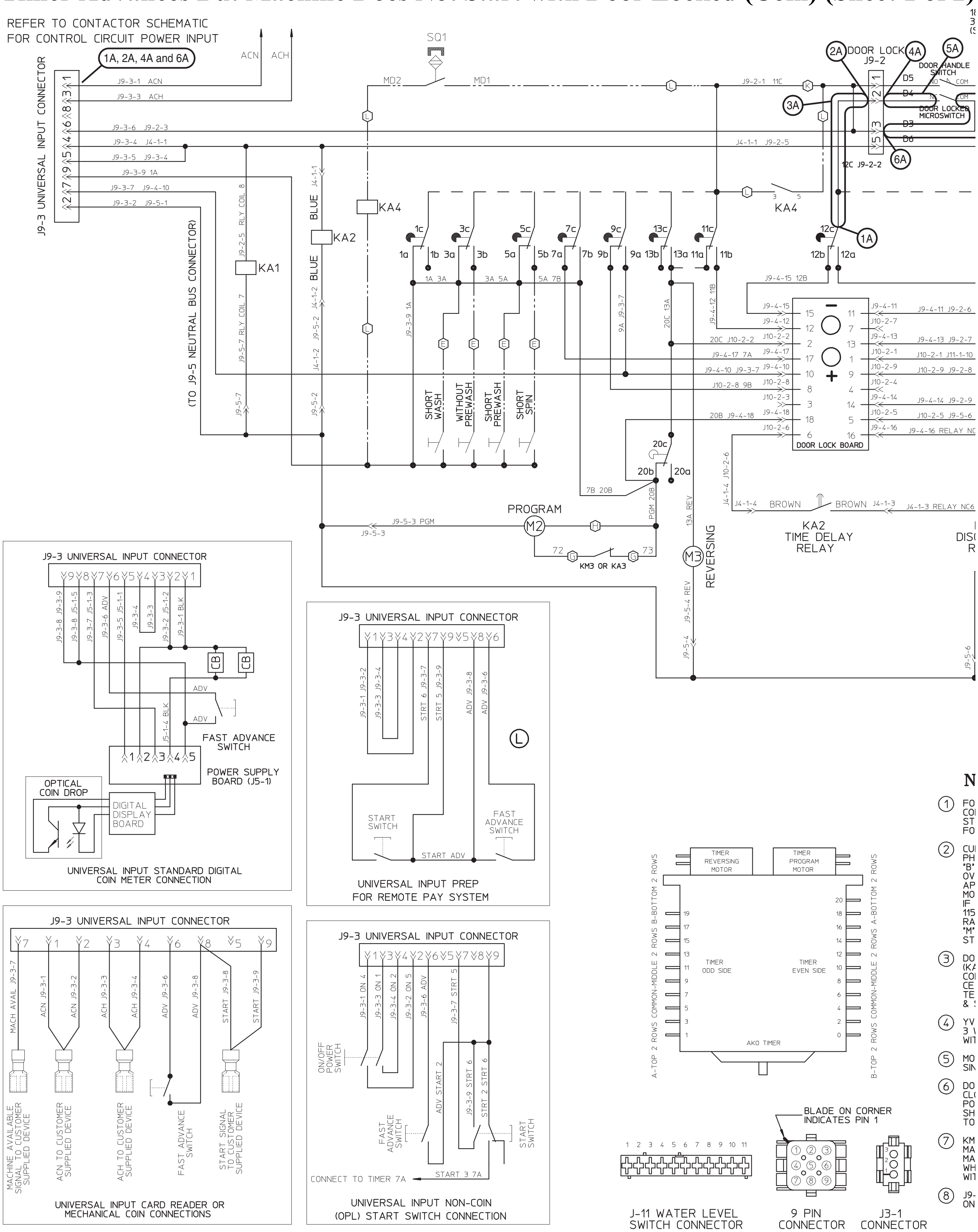


*Note: All voltage readings are approximate.

** Note: All voltage readings should be taken from input connector J9-3-1 as a neutral point.

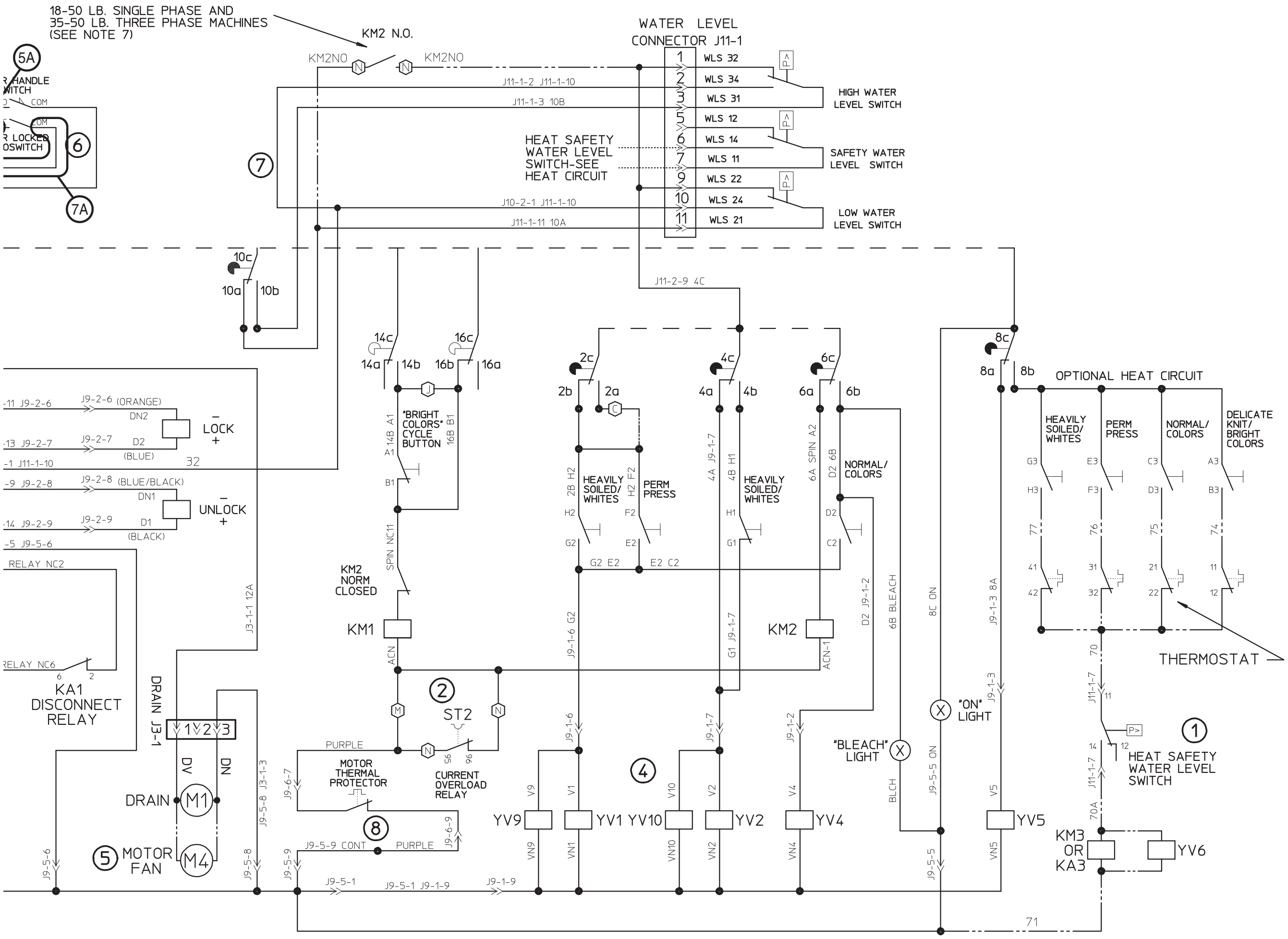
Please refer to the following 2 pages for wiring diagram information.

Timer Advances But Machine Does Not Start with Door Locked (Coin) (Sheet 1 of 2)



NOTE: Refer to the wiring diagram supplied with your machine.

Timer Advances But Machine Does Not Start with Door Locked (Coin) (Sheet 2 of 2)



NOTES

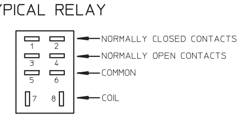
1. FOR OPTIONAL STEAM HEAT, REPLACE HEAT CONTACTOR WITH STEAM HEAT RELAY AND STEAM VALVE. SEE ELECTRIC HEAT SCHEMATIC FOR HEAT ELEMENT CONNECTIONS.
2. CURRENT OVERLOAD RELAY IS USED ON SINGLE PHASE MACHINES ONLY, EXCLUDING THE 18 LB. "B" AND "E" VOLTAGE MACHINES. ST2 CURRENT OVERLOAD RELAY MUST BE SET TO "TRIP" AT APPROPRIATE CURRENT LOAD. SET DIAL TO MOTOR NAMEPLATE FULL LOAD CURRENT RATING. IF MOTOR HAS SERVICE FACTOR OF LESS THAN 115, SET DIAL TO 90% OF FULL LOAD CURRENT RATING. ALSO SET OPERATING MODE DIAL TO "M" (MANUAL RESET) TO PREVENT ACCIDENTAL STARTING OF MOTOR.
3. DOOR MAGNETIC SWITCH (SQ1) AND SAFETY RELAY (KA4) USED ON "CE" OPTION MACHINES ONLY. CONNECT WIRE "D6" TO DOOR SAFETY RELAY FOR CE UNITS, OTHERWISE CONNECT WIRE D6 TO TERMINAL STRIP TERM #6 WHEN MAGNETIC SWITCH & SAFETY RELAY ARE NOT USED.
4. YV9 AND YV10 ARE USED WITH TWO SEPARATE 3 WAY ELBI WATER VALVES, ARE NOT USED WITH MULLER 3 WAY MIXING VALVE.
5. MOTOR COOLING FAN IS ONLY USED ON 50LB. SINGLE PHASE MACHINES.
6. DOOR LOCKED SWITCH IS WIRED TO NORMALLY CLOSED CONTACT, BUT IS SHOWN IN UNLOCKED POSITION. OTHER SWITCHES AND DEVICES ARE SHOWN IN DOOR OPEN POSITION WITH NO POWER TO MACHINE.
7. KM2NO WATER LEVEL SWITCH BYPASS WIRES MAY BE PRESENT ON 35 AND 50 LB. 3 PHASE MACHINES. THEY MUST NOT BE DISCONNECTED WHEN MACHINE WAS ORIGINALLY EQUIPPED WITH THESE WIRES.
8. J9-6 MOTOR CONNECTOR MAY NOT BE PRESENT ON ALL MACHINES.

LEGEND

- Ⓒ CONN. FOR WARM WATER RINSES (HOT & WARM CYCLES)
- Ⓔ NOT FACTORY INSTALLED
- Ⓖ ADD CONNECTION FOR HEAT
- Ⓗ REMOVE CONNECTION FOR HEAT
- Ⓙ REMOVE CONNECTION FOR GENTLE AGITATION IN DELICATE CYCLE
- Ⓚ REMOVE CONNECTION FOR CE MARK OPTION
- Ⓛ ADD CONNECTION FOR CE MARK OPTION
- Ⓜ CONNECTION FOR 3 PHASE MACHINES
- Ⓝ CONNECTION FOR SINGLE PHASE MACHINES
- J9-5-1 CONNECTOR/PIN NUMBER J9-5(CONNECTOR #)-1(PIN #)
- REVERSING TIMER CONTACTS FOR WASH AGITATION
- PROGRAM TIMER CONTACTS
- — — — CONNECTIONS INTERNAL TO DEVICE
- ——·—— OPTIONAL CONNECTIONS

KM1 - WASH CONTACTOR
KM2 - SPIN CONTACTOR
KM3 - OPTIONAL HEAT CONTACTOR
KA1 - TIME DELAY DISCONNECT RELAY
KA2 - DOOR UNLOCK TIME DELAY
KA3 - STEAM HEAT RELAY
KA4 - DOOR SAFETY RELAY
SQ1 - MAGNETIC DOOR POSITION SENSOR
ST2 - CURRENT OVERLOAD RELAY (1Ø)
YV1 - HOT FILL VALVE
YV2 - COLD FILL VALVE
YV4 - SUPPLY 2 VALVE (BLEACH)
YV5 - SUPPLY 3 VALVE (SOFTENER)
YV6 - OPTIONAL STEAM HEAT VALVE
YV9 - SUPPLY 1 HOT FLUSH VALVE
YV10- SUPPLY 1 COLD FLUSH VALVE
M1 - DRAIN VALVE MOTOR
M2 - TIMER PROGRAM MOTOR
M3 - TIMER REVERSING MOTOR
M4 - OPTIONAL MOTOR FAN *C50 1Ø

TYPICAL RELAY

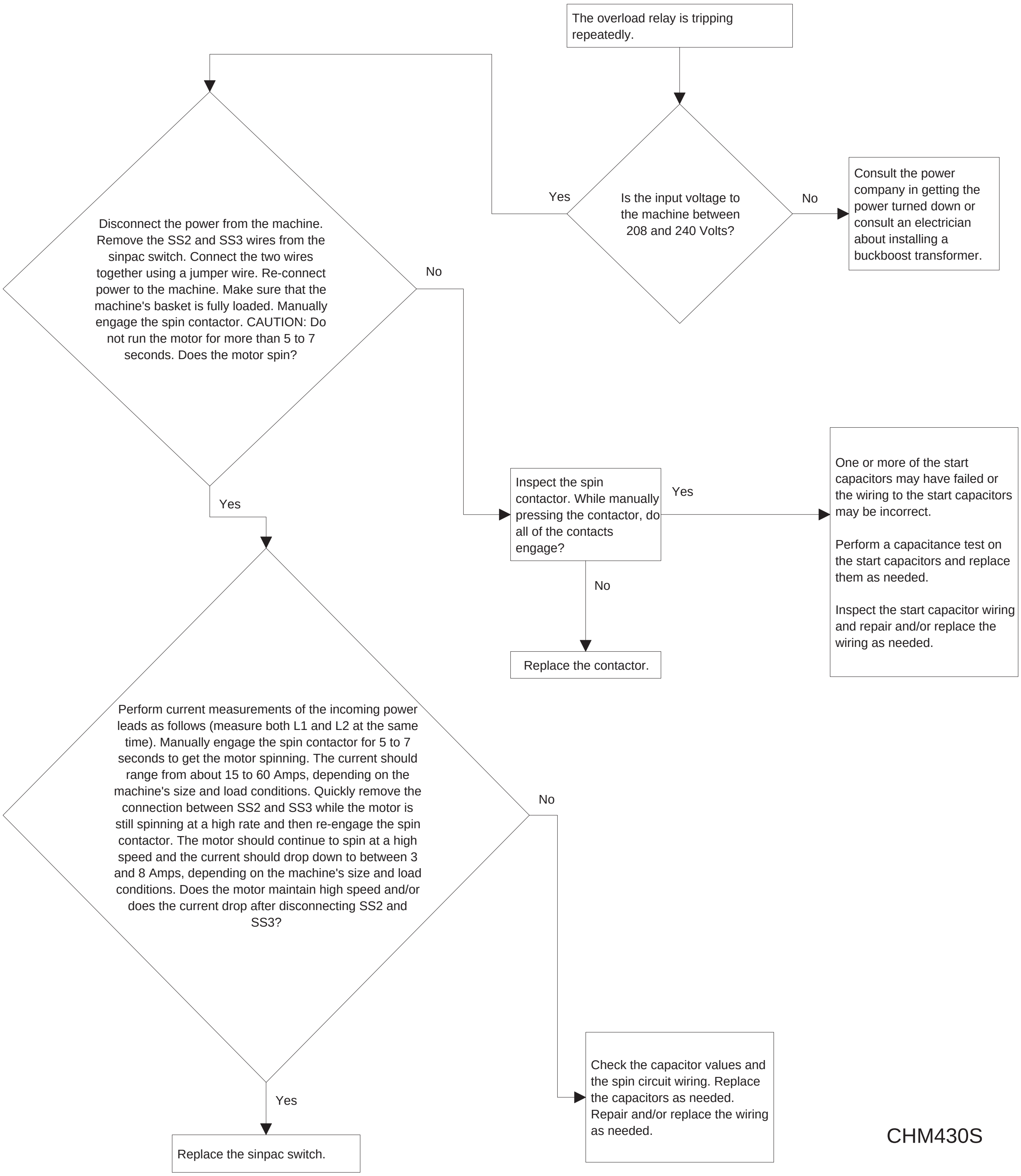


ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT POSITIONS ARE THE SAME.

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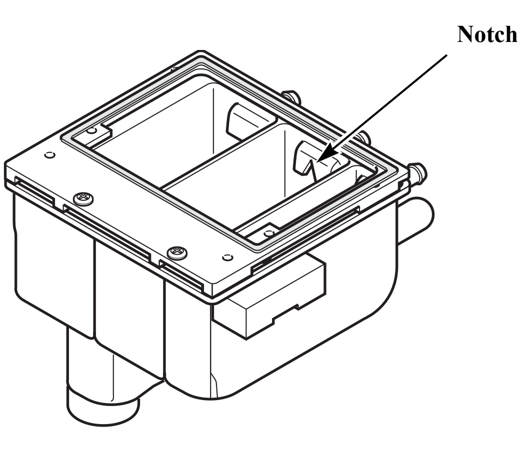
26. Overload Relay Tripping Repeatedly

Repeated overload tripping may result from a failed sinpac switch. Symptoms of a failed sinpac switch may include motor humming without rotation during spin or high current during running speed.

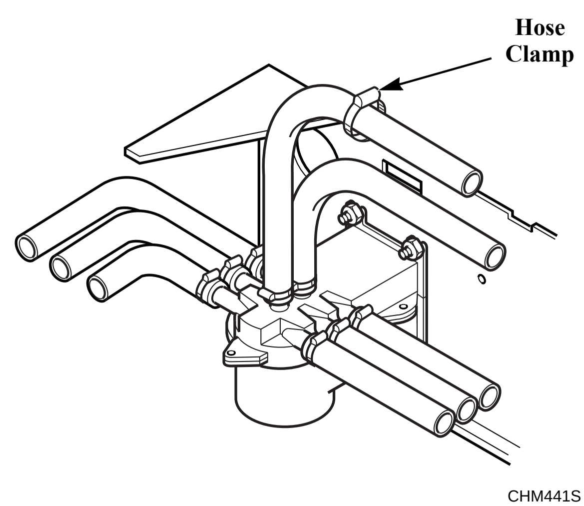


27. Compartment 2 of Supply Dispenser Not Flushing Completely

Dispenser Illustration



Vacuum Breaker Illustration



28. Troubleshooting and Cleaning the Coin Drop

When coins are placed into the coin slot, do they fall into the coin vault and does the coin drop sensor register that coins have been entered? Refer to *Figure 1* for the path that coins follow when the drop is working properly.

No

Is proper electrical power supplied to the coin drop?

- No: Refer to the wiring diagram supplied with the machine for connection information.
- Yes

Is the machine level?

- No: Refer to the installation manual supplied with the machine for instructions on leveling the machine.
- Yes

Is the coin drop clean?

- No:

1. Disconnect electrical power to the machine and the coin drop.

2. Remove the coin drop from the machine.

3. If lint is preventing coins from rolling through the coin drop, blow compressed air through the coin entry and along the side of the coin drop. Refer to *Figure 2*.

4. Insert a coin into the coin drop. If the coin does not fall through the drop, continue to step 5.

5. Remove the cotter pin from the top of the drop. Refer to *Figure 2*. Save the pin for reinstallation when the cleaning of the coin drop is complete.

6. Move the metal clip closer to the sensor so that it comes off of the frame. Refer to *Figure 2*.

7. Remove the coin return from the coin drop frame. Refer to *Figure 3*.

8. Check the path in the coin drop for lint and residue. If lint or light residue is present, use a cotton swab to remove it. If heavy residue is present, it may be necessary to first scrape off the excessive residue and then to use a cotton swab dipped in water or isopropyl alcohol to remove the remainder of the residue. Refer to *Figure 4*.

9. Check the return pendulum to verify it swings freely. If the pendulum does not swing freely, spray the pendulum pivot point with Teflon-based lubricant and move the pendulum back and forth 3 times. An additional application of Teflon-based lubricant may be necessary to ensure the pendulum swings freely. Refer to *Figure 5*.

10. Check the coin drop sensor for dust or dirt on the eyes. Wipe the eyes with a dry cotton swab. Refer to *Figure 6*. IMPORTANT: Do not use isopropyl alcohol to clean the electronic sensor or eyes.

11. Reinstall the coin return onto the coin drop frame.

12. Reinstall the metal clip and slide toward the coin insert slot. All cotter pin holes must line up.

13. Reinstall the cotter pin.

14. Place the coin drop on a level surface to verify that coins follow the correct path to the coin drop. It may be necessary to lift the coin drop to allow the coin to follow through the sensor.

15. Reinstall the coin drop into the machine.

16. Reconnect electrical power to the machine and coin drop.

17. Insert a coin into the coin drop to verify that the coin drop is operating properly.

If the coin drop does not operate properly after the above steps have been completed, corrosion of the metal or vandalized components within the coin drop may be preventing it from functioning properly. Replace the coin drop.

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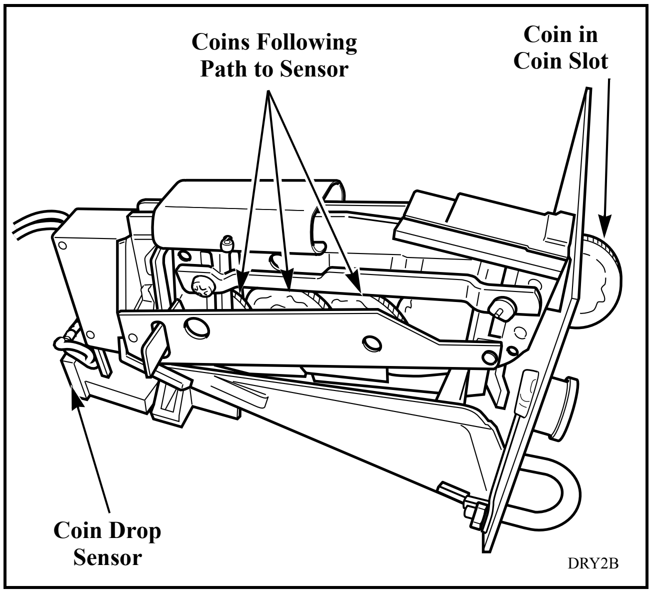


Figure 1

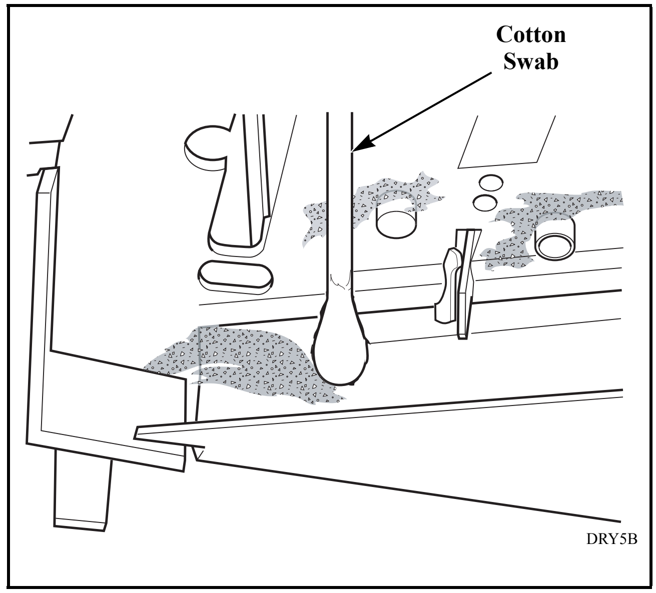


Figure 4

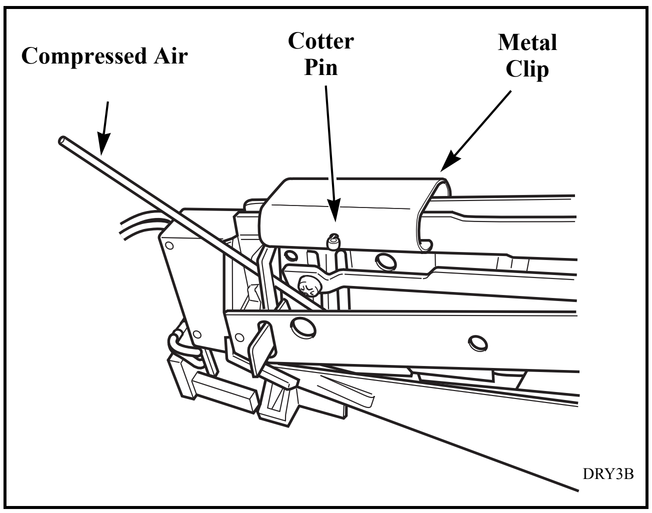


Figure 2

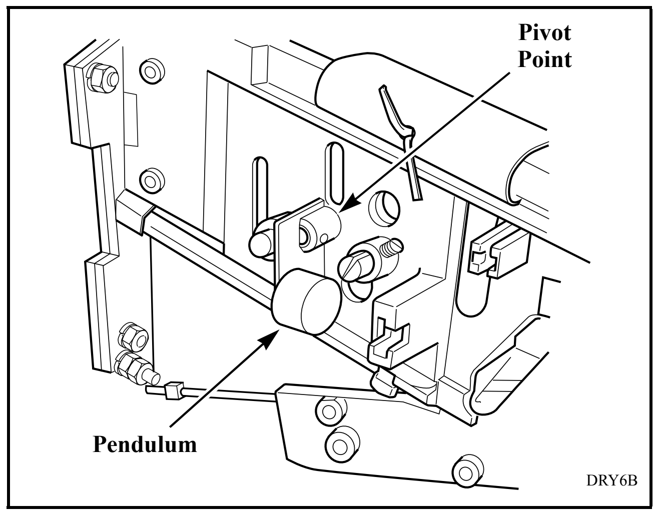


Figure 5

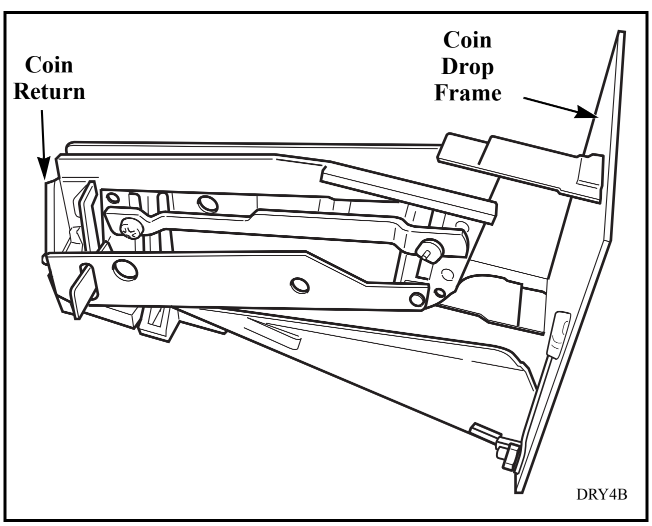


Figure 3

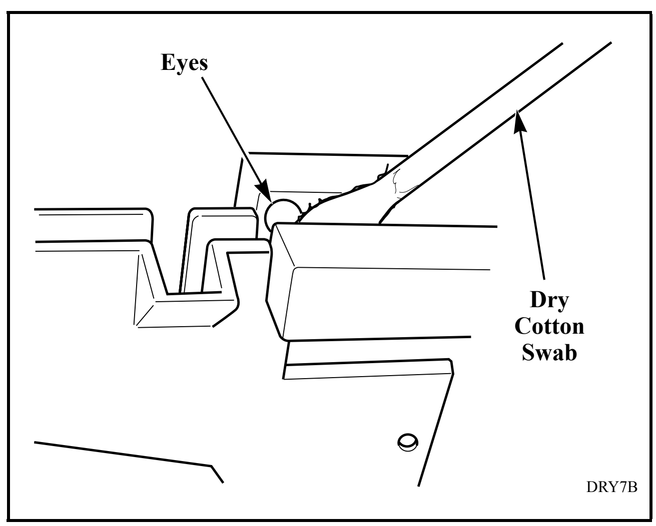


Figure 6